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STATUS REPORT:
State Progress on 1990 Health Objectives for the Nation

Public Health Foundation
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FOREWORD

The establishment of national health objectives for the year 1990 signified a major step forward in the nation's fight to prevent disease. Although the objectives are national in scope, their attainment depends ultimately on progress that occurs at the state and local levels. This report looks in detail at individual states' progress toward achieving selected objectives. The report will be a useful tool for policymakers at all levels as they chart how the nation's health status has changed and where it is headed.

We are indebted to Dr. Stephen Corbin at the Office of Disease Prevention and Health Promotion who provided insightful guidance throughout the preparation of this report. Thanks go also to the many people at the Centers for Disease Control (CDC) and the National Center for Health Statistics, now part of the CDC, who provided most of the data in the report. Of special note was the assistance we received from Patricia Golden, Anita Powell, and Sherry Murphy at the National Center for Health Statistics.

We invite comments on this report. Please address communications to the Public Health Foundation, 1220 L Street, N.W., Washington, D.C. 20005.

James T. Dimas
Executive Director

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INTRODUCTION

In 1979, the U.S. Department of Health and Human Services published its landmark report, *Healthy People: The Surgeon General's Report on Health Promotion and Disease Prevention.* According to the report, an analysis of the 10 leading causes of death suggested that many deaths in the United States are preventable. It estimated that approximately one-half of U.S. mortality was due to unhealthful behavior, one-fifth to environmental hazards, one-fifth to human biological factors, and one-tenth to inadequacies in the health care system.[1]

In an effort to improve the nation's health status, the Surgeon General, in *Healthy People*, set national goals for promoting healthful lifestyles, reducing environmental hazards, and improving health care services by 1990. The report suggested 15 priority areas in which the nation should focus its disease prevention and health promotion activities. The Surgeon General stated that disease prevention and health promotion activities would save lives and improve the quality of life in the United States. In addition, health promotion and disease prevention activities may save money by reducing the need for health care services and by increasing the nation's productivity.

One year after the Surgeon General's report, the Department of Health and Human Services published *Promoting Health/Preventing Disease: Objectives for the Nation.*[2] The report contained 226 specific, measurable health objectives designed to ensure achievement of the overall national goals set forth in the Surgeon General's report. The objectives were developed with the input of several hundred individuals and organizations representing the public and private sectors.

National Progress Toward Meeting the Objectives

Since the establishment of the national objectives, the health of the nation has improved in many areas. *The 1990 Health Objectives for the Nation: A Midcourse Review*, published by the Department of Health and Human Services in 1986, is the most recent comprehensive examination of the nation's progress toward meeting the objectives. The report reviewed progress made from 1980 through 1985 and predicted, based on trends, that 48 percent of the 226 objectives would be met and 26 percent would not be met by 1990.[3] The priority areas showing the least progress were pregnancy and infant health, family planning, and physical fitness and exercise; those showing the greatest progress were high blood pressure control, immunization, surveillance and control of infectious diseases, and smoking and health.[4]

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[1] U.S. Department of Health, Education, and Welfare, Healthy People: The Surgeon General's Report on Health Promotion and Disease Prevention (DHEW Publication No. (PHS) 79-55-71). Washington, D.C.: U.S. Government Printing Office, 1979, p. 9.

[2] U.S. Department of Health, Education, and Welfare, Promoting Health/Preventing Disease: Objectives for the Nation. Washington, D.C.: U.S. Government Printing Office, 1980.

[3] U.S. Department of Health and Human Services, The 1990 Health Objectives for the Nation: A Midcourse Review. Washington, D.C.: U.S. Government Printing Office, 1986, p. 6.

Progress on the remaining objectives could not be assessed because data for these objectives were, and are still, not available. This is a particular problem for the toxic agent and radiation control priority area in which data are unavailable for 16 of the 20 objectives.[5]

State Progress

This report, unlike previous reports such as *The 1990 Health Objectives for the Nation: A Midcourse Review*, which examined the nation's progress toward attaining the objectives, examines **individual states'** progress toward meeting certain of the 1990 objectives. The report provides insight into differences in state and regional progress toward meeting objectives. These differences are not apparent in national, aggregate data.

This report presents individual state progress on 29 of the 226 objectives set forth by the Department of Health and Human Services. All the data have been gathered from secondary sources, primarily from the Centers for Disease Control (CDC) and the National Center for Health Statistics (NCHS). While all 226 objectives were considered for inclusion in this report, these 29 specific objectives, dealing predominantly with health status and outcomes at an individual state level, were chosen out of the 226 for several reasons: first, uniform national data available from CDC and NCHS were likely to permit comparisons from state to state; second, data on these objectives were available for each year from 1980 through 1985 or later, thus permitting an analysis of state progress over the first half of the decade; third, reliable state specific data on other objectives, especially in the areas of public and professional awareness, were generally unavailable; and finally, objectives were chosen from as many priority areas as possible.

As at the national level, progress toward meeting objectives cannot be assessed at the state level when data are not available. The states are further hampered by the lack of information on specific population groups that is available to determine national trends. For example, states do not gather information on black male residents, by age group; therefore, homicide rates for specific age groups cannot be determined for each state. In the future, the Public Health Foundation hopes to involve states in gathering information and reporting progress on objectives for which data are not presently available.

This report is the product of a cooperative agreement between the Office of Disease Prevention and Health Promotion, U.S. Public Health Service, and the Public Health Foundation. In addition to presenting state trends on certain of the 1990 objectives, it is hoped that the report will be a useful resource for state health planning and evaluation activities.

Organization of the Report

The report presents data related to nine of the 15 priority areas identified in

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[4] Ibid., pp. 15, 25, 35, 59, 163, 177, 229.

[5] Ibid., p. 91.

Healthy People: family planning; pregnancy and infant health; immunizations; sexually transmitted disease; accident prevention and injury control; surveillance and control of infectious disease; smoking and health; misuse of alcohol and drugs; and control of stress and violent behavior. For each priority area, the report examines several objectives, and for each objective, there is a brief discussion of national and state progress and state-by-state charts which display data for the objective from 1980 through 1985 (or 1986 where data were available).[6] For objectives expressed in rates, the average annual percentage change is calculated. This value reflects annual increases or decreases in rates averaged over the time period specified, but does not account for sporadic increases or decreases (see Appendix A for details on all calculations).

Where possible, the report projects whether the state will meet the objective by 1990. These projections are based on states' progress from 1980 through 1985 (or 1986 where data were available) using a linear regression formula. These projections are not absolute predictors of the future, but merely indicate what may happen based on recent trends.

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[6] The District of Columbia is counted as a state in all analyses throughout the report.

STATE DISEASE PREVENTION AND HEALTH PROMOTION ACTIVITIES

The Surgeon General's Report, *Healthy People*, and the subsequent development of specific objectives for the nation helped focus national attention on disease prevention and health promotion activities. Secretary of Health, Education and Welfare Joseph A. Califano, Jr., stated that the report "represents an emerging consensus among scientists and the health community that the nation's health strategy must be dramatically recast to emphasize the prevention of disease."[7] One measure of success in achieving a nationwide commitment to disease prevention and health promotion is the extent to which states have adopted this focus and developed specific strategies for accomplishing the national or state-specific goals.

The first summary of state progress toward achieving these goals came in March 1986, in a report prepared by the Intergovernmental Health Policy Project (IHPP) for the Office of Disease Prevention and Health Promotion.[8] The report examined how the Surgeon General's challenge to emphasize disease prevention/health promotion had been received by the 50 states. Specifically, the report examined how states had interpreted that challenge and what strategies they had used to implement their own objectives.[9] The report found that as of October 1985, when data collection was completed, there were clear and visible signs in most states that the message of *Healthy People* and *Promoting Health/Preventing Disease* had been accepted.[10] Most states had made a good beginning, but much remained to be done.

In December 1987, the Public Health Foundation surveyed health departments in all 50 states, the District of Columbia, and four U.S. territories: American Samoa, Guam, Puerto Rico, and the Virgin Islands (hereafter referred to as states). The survey attempted to determine if states had established, or planned to establish, disease prevention/health promotion objectives. (A copy of the survey with complete results appears at Appendix B.) While seeking more precise information on the development of specific, measurable objectives, this survey questioned states about some of the same issues as the IHPP report. The two reports can be used together to gain a more complete picture of state disease prevention/health promotion activity.

Many factors affect the decisions of individual states about how to apply the national health priorities at the state level: data constraints at the state level; state fiscal priorities; and the character of health problems in the individual states.

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[7] *Healthy People*, p. vii.

[8] Executive Summary, A Review of State Activities Related to the Public Health Service's Health Promotion and Disease Prevention Objectives for the Nation, Intergovernmental Health Policy Project, March 1986.

[9] Ibid., p. 2.

[10] Ibid., pp. 3-4.

However, by all measures, states are focusing on disease prevention activities. States have embraced the concept of health objectives, and as discussed below, states have made considerable progress in adopting and utilizing their own health promotion/disease prevention objectives.

Establishing Objectives Is Widespread

The objectives in *Promoting Health/Preventing Disease* are an important component of a focused national prevention strategy.[11] The establishment of disease prevention/health promotion objectives has become an accepted part of states' health agendas across the country. Fifty-four of the 55 states responding have established their own objectives for at least some of the 15 priority areas of the national objectives or have begun the process of establishing objectives. Eighty-four percent of the states (46 states) have established objectives, and 15 percent (8 states) have begun the process. Only Arkansas indicated it had done neither. This compares with 18 states that, according to IHPP, had completed their own set of objectives for 1990 or beyond as of October 1985.[12]

State Objectives Often Reflect National Health Priorities

The objectives in *Promoting Health/Preventing Disease* were not intended to be applied, unchanged, in all states, but instead to guide state and local decision making. However, many states have, in fact, used the priority areas in the national objectives to formulate their objectives, while fewer states have established their own priority areas. Reports from the states on their progress toward meeting the state objectives indicate that the priority areas addressed by states reflect individual state health concerns and the availability of state level data pertaining to the priority areas. States tend to set objectives in areas where data exist to track progress.

Twelve (26 percent) of the 46 states with objectives have set objectives for each of the 15 priority areas. These states are: Arizona, Guam, Hawaii, Indiana, Kansas, Maine, Montana, New York, Ohio, Oklahoma, Rhode Island, and Texas. Another 20 states have set objectives for at least two-thirds of the priority areas.

For some priority areas, most of the 46 states have established objectives, while other priority areas have been addressed by only about half of these states. For example, forty-three of the 46 states have established objectives for pregnancy and infant health. At least 40 states have established objectives for blood pressure, immunizations, sexually transmitted disease, dental health, and nutrition. At the other extreme, only 22 states have established occupational safety objectives.

Table one details which states have established objectives for which priority areas.

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[11] *Promoting Health/Preventing Disease*, p. 4.

[12] *IHPP Report*, p. 4.

TABLE 1 - National Priority Areas Addressed By States

	Blood Pressure	Family Planning	Pregnancy and Infant Health	Immunizations	Sexually Transmitted Disease	Toxic Agent Control	Occupational Safety	Accident Prevention & Injury Control	Dental Health	Surveillance & Control of Infectious Disease	Physical Fitness	Smoking and Health	Stress & Violent Behavior	Alcohol & Drugs	Nutrition
NEW ENGLAND															
Maine	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
New Hampshire	none														
Vermont	x	x	x	x	x	x	x	x	x	x		x	x	x	x
Massachusetts	x		x	x	x	x	x	x	x	x	x	x		x	x
Rhode Island	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Connecticut	x	x	x	x	x	x		x	x	x	x	x		x	x
MID-ATLANTIC															
New York	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
New Jersey	x	x	x	x	x	2	x	x	x	x	x	x		x	x
Pennsylvania	x	x	x	x	x	x			x	x				x	x
EAST/NORTH CENTRAL															
Ohio	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Indiana	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Illinois	x	x	x	x	x		x	x	x	x	x	x	x	x	x
Michigan	none														
Wisconsin				x	x										
WEST/NORTH CENTRAL															
Minnesota				x				x	x			x			x
Iowa	none														
Missouri	x	x	x	x	x	x	x	x	x	x	x	x		x	x
North Dakota		x	x	x	x			x	x	x		x			
South Dakota	none														
Nebraska	x	x	x	x	x	x		x	x		x	x	x	x	x
Kansas	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
SOUTH ATLANTIC															
Delaware	x	x	x	x	x	x				x	x	x	x		x
Maryland	none														
Dist. of Columbia	x		x	x	x				x	x		x		x	x
Virginia	1	x	x		x	x		x	x	x					x
West Virginia	none														
North Carolina	x	x	x	x	x			x	x						
South Carolina	x	x	x	x	x	x		x	x	x	x	x		2	x
Georgia	x	x	x	x	x		x	x	x			x	x	x	x
Florida	1	x	x	x	x	x	x	x	x	x		x	x	x	x
EAST/SOUTH CENTRAL															
Kentucky	x	x	x	x	x	x		x	x		x	x			x
Tennessee	x	x	x	x	x			x	x	x	x	x	x	x	x
Alabama	x	x	x	x	x				x	x					x
Mississippi	x	x	x	x	x	x	x	x	x	x			x		x
WEST/SOUTH CENTRAL															
Arkansas	none														
Louisiana	x	x	x	x	x				x	x					x
Oklahoma	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Texas	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
MOUNTAIN															
Montana	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Idaho	~~1~~	x	x	x	x	x	2	2	x	x		1		2	x
Wyoming			x					x					x		
Colorado		x	x		x			x	x		x	x	x	x	x
New Mexico	x	x	x	x	x	3		x	x	x		x	x	x	x
Arizona	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Utah	x			x	x			x		x		x			
Nevada	none														
PACIFIC															
Washington		x	x	x	x			x	x	x					
Oregon	x	x	x	x					x		x	x		x	x
California	x	x	x	x	x	x	x	x		x	x	x	x	x	x
Alaska	none														
Hawaii	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
U.S. TERRITORIES															
American Samoa	x	x	x	x	x	x	x		x	x		x		x	x
Guam	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Puerto Rico	x	x	x	x					x			x			x
Virgin Islands	x		x								x	x	x	x	x
TOTAL	40	39	43	42	41	27	22	35	40	35	26	37	25	30	40

COUNTED IN TOTALS
1 = Part of Larger Program

NOT COUNTED IN TOTALS
2 = Information Not Provided
3 = Ongoing Efforts, No Specific Goals

Sixteen states have established objectives that are not covered by the 15 priority areas. These objectives often include a general grouping of child, adolescent, and school health, and public health education objectives. Other states have established objectives for specific illnesses or health issues, such as cervical cancer, diabetes, arthritis, osteoporosis, weight control, reproductive health, chronic disease control, and aging. Still other states have established objectives for specific external health hazards, such as food protection, water programs, sanitation, childhood lead poisoning prevention, and shellfish sanitation. Two states have developed objectives for rape crisis issues, one for domestic violence, and two have objectives dealing with AIDS. Additionally, two states have established objectives dealing with data collection and health surveys.

In some states, departments other than the health departments may have responsibility for some priority areas. For example, state environmental health departments may be responsible for issues of occupational safety and toxic agent control. Because the Public Health Foundation survey was sent only to state health departments, the degree to which health departments compiled information from other departments, or did not include such information in the survey, cannot be determined. As such, the state objectives setting enterprise may be more extensive than reported here.

Objectives Are Generally Time-limited, Quantifiable, and Measurable

Reliable data, continuously reported and coded according to universally accepted definitions and conventions, are essential for documenting the true nature of the problems preventive measures should address.[13] Reliable data are also essential for charting trends towards achieving the objectives.

In order to demonstrate progress, many states have modeled their objectives after the 1990 objectives; that is, they have established time-limited and quantifiable objectives. In addition, most states have linked their objectives to existing data systems so they can measure progress towards meeting the objectives.

Time-limited

With the national objectives being the primary impetus for states to establish objectives, the year 1990 has become a focal date for many states. The Foundation found that, of the 46 states that had established objectives, 40 established at least some objectives for 1990 or beyond. Fifteen of the 40 states have set the date for accomplishing all of their objectives at 1990. Nine additional states have set 1990 as the date for accomplishing half or more of their objectives.

A smaller percentage of states have set objectives for dates later than 1990. Ten of the 46 states have a majority of their objective dates set after 1990, with three of these states -- New York, Missouri, and Arizona -- having set some or all of their goals for the year 2000.

The remaining states have set dates for accomplishing many of their objectives prior to 1990. And among the 46 states, 12 have included some progressive objectives, with a new goal for each year or every few years.

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[13] *Promoting Health/Preventing Disease*, p. 3.

Virginia, for example, has a six-year plan with objectives for every two years from 1988 through 1994.

The following table displays the distribution of dates for accomplishing objectives for each of the priority areas.

TABLE 2 - Number of States With Dates For Accomplishing Objectives For Each Priority Area

PRIORITY AREA	Prior to 1990	1990	After 1990- Prior to 2000	2000	No date specified	Total number of states
1. Blood Pressure	9	21	6	2	2	40
2. Family Planning	7	24	6	1	1	39
3. Pregnancy and Infant Health	8	25	6	3	1	43
4. Immunizations	13	22	3	1	3	42
5. Sexually Transmitted Disease	9	27	3	1	1	41
6. Toxic Agent Control	3	14	4	2	4	27
7. Occupational Safety	2	12	3	2	3	22
8. Accident Prevention & Injury Control	3	22	6	2	2	35
9. Dental Health	10	19	5	3	3	40
10. Surveillance & Control of Infectious Disease	8	19	5	1	2	35
11. Physical Fitness	0	20	3	1	2	26
12. Smoking and Health	5	23	5	2	2	37
13. Stress & Violent Behavior	1	14	8	1	1	25
14. Alcohol & Drugs	3	20	4	1	2	30
15. Nutrition	11	22	5	1	1	40

Quantifiable

In most states, objectives are stated in terms of rates, numbers of cases, or the existence or lack of implementation; in other words, the objectives are quantifiable. For example, in 30 of the 43 states that have established objectives for the pregnancy and infant health priority area, at least 76 percent of the objectives are quantifiable. The immunization and sexually transmitted disease priority areas also show a large number of states with objectives that are mostly quantifiable.

States were less likely to have established quantifiable objectives for the occupational safety and toxic agent control priority areas. For the nutrition priority area, many states have set objectives, but not quantifiable ones. In only 17 of the 46 states are at least 76 percent of the objectives for all priority areas quantifiable.

The following table displays the level of quantifiable objectives in the states for each priority area.

TABLE 3 - Number of States With Quantifiable Objectives For Each Priority Area

PRIORITY AREA	Number of states with objectives	Percentage of states' objectives that are quantifiable 0-25%	26-50%	51-75%	76-100%	no response
1. Blood Pressure	40	3	1	6	25	5
2. Family Planning	39	3	2	5	27	2
3. Pregnancy and Infant Health	43	0	5	6	30	2
4. Immunizations	42	1	2	6	31	2
5. Sexually Transmitted Disease	41	1	4	3	31	2
6. Toxic Agent Control	27	8	4	0	13	2
7. Occupational Safety	22	7	1	3	10	1
8. Accident Prevention & Injury Control	35	4	3	4	24	0
9. Dental Health	40	5	3	2	27	3
10. Surveillance & Control of Infectious Disease	35	2	4	6	22	1
11. Physical Fitness	26	4	2	2	17	1
12. Smoking and Health	37	3	2	4	24	4
13. Stress and Violent Behavior	25	2	4	3	15	1
14. Alcohol and Drugs	30	2	5	3	17	3
15. Nutrition	40	9	1	4	23	3

Measurable

The degree to which objectives are measurable varies widely from state to state. Measurable is defined as the availability of data to assess whether the objective has been met when the date set for the objective is reached. In only 10 of the 46 states are at least 76 percent of the objectives for all priority areas measurable. Thus, while availability of data is an important consideration, some states have chosen to establish objectives in quantifiable language, though no data are currently available to measure accomplishment of the objectives.

Immunization and sexually transmitted disease are the two priority areas that most frequently include measurable objectives. Occupational safety, toxic agent control, physical fitness, and stress and violent behavior are the four priority areas where objectives are least likely to be measurable.

The following table specifies the level of measurable objectives in the states for each priority area.

TABLE 4 - Number of States With Measurable Objectives For Each Priority Area

	Number of states with objectives	Percentage of states' objectives that are measurable				
PRIORITY AREA		0-25%	26-50%	51-75%	76-100%	no response
1. Blood Pressure	40	4	5	7	22	2
2. Family Planning	39	3	5	5	24	2
3. Pregnancy and Infant Health	43	0	5	11	24	3
4. Immunizations	42	0	3	9	28	2
5. Sexually Transmitted Disease	41	2	5	5	27	2
6. Toxic Agent Control	27	8	6	2	9	2
7. Occupational Safety	22	10	2	3	6	1
8. Accident Prevention & Injury Control	35	2	3	8	20	2
9. Dental Health	40	6	4	7	21	2
10. Surveillance & Control of Infectious Disease	35	2	5	6	20	2
11. Physical Fitness	26	6	6	4	9	1
12. Smoking and Health	37	2	7	6	18	4
13. Stress and Violent Behavior	25	3	8	5	9	0
14. Alcohol and Drugs	30	3	10	4	10	3
15. Nutrition	40	7	3	12	15	3

National Objectives Useful In Setting State Objectives

Promoting Health/Preventing Disease, *Model Standards for Community Preventive Health Services*, and *Healthy People* have been useful resources to states in the objective setting process. Of the 46 states that have established objectives, 80 percent rated *Promoting Health/Preventing Disease* above average in terms of usefulness in setting those objectives. This is consistent with the IHPP report which indicated that both *Promoting Health/Preventing Disease* and *Healthy People* had been disseminated widely in state health departments and beyond, and most states had used these publications in their health promotion activities.[14]

The *Model Standards for Community Preventive Health Services* were not used by as many states in establishing their objectives. Only 35 percent of the 46 states rated its usefulness as above average. IHPP reported that states that are placing increased emphasis on relationships with local health agencies found this publication particularly helpful.[15]

In addition to these resources, several states used internal state materials to set objectives, such as state budget plans, state health plans, and state-collected statistics. A few states indicated that vital statistics information from the Centers for Disease Control was also helpful.

Dissemination of State Health Objectives

States have recognized that many groups in the community must be involved in the objective-setting process, including health professionals, voluntary health organizations, community organizations, as well as state and local health departments. Disseminating information on the objectives is important in encouraging broad-based support.

Twenty-one (46 percent) of the states with objectives have published reports on their progress toward meeting the state health objectives. In several of the remaining states, reports are planned, or reports on individual health issues, rather than consolidated reports, have been published. Of the 15 reports reviewed by the Public Health Foundation, no report addressed all 226 of the national objectives, and most reviewed fewer than 100 state objectives.

Fifteen (33 percent) of the states with objectives had held statewide conferences on the objectives, and Rhode Island indicated that regular public hearings are held on the state health plan. California and Wisconsin are considering conferences, though no dates are set. The remaining states said that no conference on the objectives is planned. IHPP found that 10 states had held disease prevention/health promotion conferences as of October 1985. Thus, an additional five states have held conferences in the last two years.

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[14] *IHPP Report*, p. 4.

[15] Ibid., p. 5.

State Level Disease Prevention/Health Promotion Units

Another method states can use to help focus attention, as well as to promote and coordinate disease prevention/health promotion activities, is to establish centralized units to coordinate state efforts. IHPP reported that in the year prior to October 1985, 12 states had established units devoted to disease prevention/health promotion activities. Seventy-three percent of the Foundation's 55 respondents (40 states) have established disease prevention/health promotion units within the state health agency. Two additional states have health education departments.

Most state disease prevention/health promotion units have been established within the last decade. A few were initiated in the early 1970s and Tennessee and Nebraska have units dating back to the 1940s.

The role of disease prevention/health promotion units varies among states. Some state units conduct educational activities and risk reduction programs, while others primarily establish policy, provide technical assistance, and monitor state health trends, and other state, local, and worksite programs.

The issues that the units focus on vary from state to state. Some deal with a broad range of topics, while for others, one or a few issues consume most of their effort. For example, the Mississippi health promotion/disease prevention unit is currently focusing on AIDS, and the Illinois unit, which has a general theme of reducing risk factors for chronic disease, is currently focusing on smoking cessation issues, specifically the use of smokeless tobacco.

Effect on State Legislative Action

Establishing objectives may help to educate others in the state about the importance of disease prevention/health promotion activities, and possibly affect the activities of state legislatures in addressing these issues. The IHPP report found that governors in ten states endorsed disease prevention/health promotion initiatives in their 1985 "State of the State" messages, and during 1985, disease prevention/health promotion legislation was introduced in about two-thirds of the states.[16]

Eighteen (39 percent) of the 46 Foundation respondents with objectives indicated that the objectives had affected legislative decisions. For example, Tennessee stated that the "data collected in the course of measuring the objectives are utilized in current and future budget justifications. In addition, these data are utilized in responding to legislative requests, hearings, etc." Several states expressed similar thoughts.

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[16] Ibid., p. 5.

FAMILY PLANNING

Introduction

The ability of men and women to plan pregnancies improves the emotional, economic, and social well-being of families. Approximately one-half of all pregnancies and three-fourths of adolescent pregnancies are unintended.[17] Each year, approximately one million adolescent pregnancies occur, with about one-half ending in abortion.[18]

Adolescent motherhood is associated with greater risk of poor pregnancy outcome, lower educational and occupational achievement for the mother, reduced income and increased likelihood of welfare dependence.[19] Infants born to adolescent mothers have a higher prevalence of low birth weight and prematurity, in part, because adolescents are less likely to receive early prenatal care than are older pregnant women. Long-term consequences for children of adolescent mothers may include delayed and impaired cognitive and emotional development, which, in turn, lowers educational achievement. Often, adolescent parenthood is part of a cycle of poverty which continues from one generation to the next.

The nine objectives established for the family planning priority area are intended to reduce the number of unintended pregnancies among adolescent and adult women. The objectives range from reducing adolescent birth rates to improving the availability of family planning information to all women and men. This report examines state progress on four of the nine objectives, all of which set standards for lower adolescent birth rates.

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[17] Karen Pittman, Adolescent Pregnancy, Whose Problem Is It?. Washington, D.C.: Adolescent Pregnancy Prevention Clearinghouse, Children's Defense Fund, 1983, p.3.

[18] Ibid., p. 4.

[19] *Promoting Health/Preventing Disease*, p. 11.

OBJECTIVE: By 1990, there should be almost no unintended births to females 14 years of age and under. (Note: the assumption is made that all births to this age group are unintended).

National Progress

It is unlikely that this objective will be met since the number of births to females 14 years of age and under increased from 10,169 in 1980 to 10,220 in 1985. Although the objective is expressed in terms of number of births to females 14 years of age and under, it is more meaningful to calculate the birth rate since it expresses unintended births relative to the changing size of the population. The birth rate for this age group increased slightly, from 1.1 births per 1,000 population in 1980 to 1.2 births per 1,000 population in 1985.

State Progress

To date, no state has met this objective, and it is unlikely that any state will meet the objective by 1990. Due to the lack of accurate state population estimates of females 14 years of age and under for the years following 1980, it is not possible to calculate meaningful birth rates by state. Despite this constraint, the total number of births to adolescents 14 years of age and under in each state provides an indication of state trends. In approximately half of the states, births are increasing among females 14 years of age and under. Twenty-three states had more such births in 1985 than in 1980. Thirty states had more such births in 1985 than in 1984.

Discussion

Programmatic approaches to reducing adolescent pregnancy rates vary greatly among states and communities. Sexuality education in public schools is one primary prevention method intended to delay sexual activity as well as to educate sexually active adolescents on the importance of birth control. However, the content and timing of sexuality education has met with opposition in some communities.[20] Other primary prevention programs focus on developing incentives for adolescents to delay sexual activity and pregnancy (e.g., establishing educational and vocational goals). Secondary prevention efforts that provide contraceptives to sexually active adolescents have also faced strong opposition in some communities.[21] Prevention programs that reflect community values, yet effectively prevent births among adolescents, need to be developed in order to meet this objective.

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[20] *Midcourse Review*, p. 27.

[21] Ibid., p. 27.

TABLE 5 - Number of Live Births to Females 14 Years of Age and Under

	1980	1981	1982	1983	1984	1985
United States	10,169	9,632	9,773	9,752	9,965	10,220
Alabama	355	274	273	274	266	298
Alaska	6	11	11	11	8	13
Arizona	134	124	131	105	112	117
Arkansas	183	144	162	177	168	178
California	773	909	844	866	945	890
Colorado	57	76	62	82	66	90
Connecticut	70	62	74	99	68	102
Delaware	27	38	45	47	40	33
District of Columbia	81	62	61	48	51	64
Florida	633	603	615	635	585	641
Georgia	578	419	476	470	467	467
Hawaii	17	18	22	15	27	8
Idaho	30	20	22	21	17	18
Illinois	609	580	553	516	536	586
Indiana	217	194	189	188	185	178
Iowa	53	41	45	30	34	54
Kansas	59	56	54	49	62	73
Kentucky	221	210	180	188	215	189
Louisiana	365	363	368	357	420	377
Maine	23	10	14	15	17	18
Maryland	211	184	206	200	218	232
Massachusetts	71	95	97	86	84	113
Michigan	331	300	319	330	342	352
Minnesota	45	49	57	53	50	56
Mississippi	378	347	345	335	408	351
Missouri	219	190	148	167	158	209
Montana	13	15	13	11	14	11
Nebraska	32	27	33	29	33	23
Nevada	41	31	30	35	37	34
New Hampshire	12	5	12	13	12	11
New Jersey	291	282	246	262	276	248
New Mexico	66	76	62	82	67	63
New York	509	467	521	507	527	501
North Carolina	369	359	325	313	373	333
North Dakota	10	19	6	7	5	8
Ohio	354	396	385	381	368	444
Oklahoma	146	134	133	149	165	150
Oregon	71	60	52	52	56	42
Pennsylvania	326	302	367	366	353	360
Rhode Island	18	18	11	18	13	22
South Carolina	295	231	262	264	239	279
South Dakota	8	8	12	10	15	19
Tennessee	292	299	293	273	252	294
Texas	999	987	1088	1077	1088	1079
Utah	36	34	32	33	21	26
Vermont	8	5	5	8	8	5
Virginia	232	243	251	236	224	256
Washington	106	83	99	99	103	109
West Virginia	80	76	56	59	54	63
Wisconsin	94	93	91	98	98	123
Wyoming	15	3	15	14	15	10
U.S. Birth Rate per 1,000 Females 10-14 Years of Age	1.14	1.08	1.11	1.11	1.17	1.23

Source: National Center for Health Statistics

OBJECTIVE: By 1990, the birth rate for females 15 years of age should be reduced to 10 births per 1,000; the birth rate for females 16 years of age should be reduced to 25 births per 1,000; and the birth rate for females 17 years of age should be reduced to 45 births per 1,000.

National Progress

Since 1980, there has been a small decrease in the birth rate among females 15, 16, and 17 years of age. Despite this progress, it is unlikely the objective will be met by 1990. The birth rate among females 15 years of age decreased from 14.4 births per 1,000 in 1980 to 13.6 births per 1,000 in 1985; for females 16 years of age, it decreased from 31 to 29.7; and for females 17 years of age, it decreased from 51.8 to 50.8.

State Progress

It is not possible to calculate a meaningful birth rate for adolescents 15, 16, and 17 years of age due to unreliable population estimates for states. However, the number of births to adolescents in each state does give some indication of state trends.

The majority of states had fewer births to females 15, 16, and 17 years of age in 1985 than in 1980. Since this population is also decreasing, it is difficult to determine if individual states' birth rates declined, stayed constant, or increased slightly. However, increases in the number of births during this period may imply increases in birth rates since the national population of females aged 15, 16, and 17 has been decreasing since 1980. Six states had more births to adolescents age 15 in 1985 than in 1980, one state had more births to adolescents age 16, and two states had more births to adolescents age 17.

Thirty-three states had more births to adolescents 15 years of age in 1985 than in 1984. This coincided with an increase in the national birth rate for adolescents 15 years of age from 13.4 births per 1,000 in 1984 to 13.6 in 1985. During this period, 25 states had more births to adolescent females 16 years of age (while the national birth rate decreased slightly from 30.1 to 29.7), and 23 states had more births to adolescents 17 years of age (while the national birth rate for this population increased from 49.8 to 50.8).

Discussion

Controversy over the appropriateness of sexuality education and family planning services for adolescents has affected the implementation of some prevention programs. Some adolescents do receive free contraceptive services from family planning clinics. More than one-third of the four million persons receiving family planning services in federally funded clinics are adolescents, the majority of whom are older than 16 years of age.[22] It is estimated that over 11 million adolescents between 13 and 19 years of age are sexually active.[23]

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[22] Ibid., p. 29.

[23] Alan Guttmacher Institute, "United States and Cross-National Trends in Teenage Sexuality and Fertility Behavior," (unpublished data). Alan Guttmacher Institute, 1986.

TABLE 6 - Number of Live Births to Females 15 Years of Age

	1980	1981	1982	1983	1984	1985
United States	28,178	25,961	25,091	24,686	24,142	25,002
Alabama	803	747	649	637	680	662
Alaska	40	34	33	35	36	40
Arizona	411	388	334	370	347	362
Arkansas	487	402	397	416	371	399
California	2450	2488	2333	2330	2552	2555
Colorado	234	227	229	250	246	224
Connecticut	186	183	215	204	196	236
Delaware	104	99	90	105	61	72
District of Columbia	138	115	138	129	119	124
Florida	1538	1384	1342	1362	1338	1352
Georgia	1283	1066	966	958	941	1022
Hawaii	69	54	53	73	63	68
Idaho	85	72	79	75	63	50
Illinois	1584	1508	1334	1316	1215	1269
Indiana	652	568	572	548	467	535
Iowa	179	173	141	139	135	132
Kansas	186	179	183	178	176	159
Kentucky	697	617	574	498	474	515
Louisiana	982	885	890	829	870	871
Maine	80	89	78	75	73	58
Maryland	460	503	491	453	470	474
Massachusetts	300	275	300	255	265	295
Michigan	932	851	771	761	793	843
Minnesota	188	199	172	182	162	161
Mississippi	868	741	705	633	654	699
Missouri	642	563	506	492	456	494
Montana	63	50	52	48	53	49
Nebraska	120	110	85	85	104	102
Nevada	86	91	90	87	83	86
New Hampshire	39	41	37	33	46	40
New Jersey	659	610	630	600	575	655
New Mexico	252	203	206	234	205	199
New York	1380	1320	1354	1388	1243	1338
North Carolina	913	790	827	809	744	776
North Dakota	43	39	29	25	19	26
Ohio	1162	1022	1041	1025	1027	992
Oklahoma	439	398	430	445	420	428
Oregon	204	184	175	196	170	168
Pennsylvania	966	989	955	937	928	997
Rhode Island	47	61	54	68	37	59
South Carolina	670	592	600	522	515	546
South Dakota	58	55	37	42	32	35
Tennessee	849	733	684	633	621	666
Texas	2894	2657	2652	2714	2615	2669
Utah	141	127	120	118	124	109
Vermont	31	32	25	31	32	21
Virginia	653	567	622	544	517	566
Washington	309	300	282	272	307	295
West Virginia	272	230	200	197	188	184
Wisconsin	298	298	277	297	275	292
Wyoming	52	52	52	33	126	33
U.S. Birth Rate per 1,000 Females 15 Years of Age	14.4	14.0	13.9	14.0	13.4	13.6

Source: National Center for Health Statistics

TABLE 7 - Number of Live Births to Females 16 Years of Age

	1980	1981	1982	1983	1984	1985
United States	63,198	59,603	57,348	55,000	53,178	53,474
Alabama	1726	1530	1378	1389	1310	1270
Alaska	98	101	101	115	89	89
Arizona	899	921	898	865	921	878
Arkansas	1001	938	836	813	835	768
California	5856	5924	5530	5494	5436	5637
Colorado	655	644	636	589	608	637
Connecticut	483	492	473	421	409	465
Delaware	228	157	188	162	106	160
District of Columbia	235	295	193	223	206	220
Florida	2931	2830	2831	2599	2580	2611
Georgia	2430	2349	2200	2071	1989	2043
Hawaii	157	169	144	171	158	161
Idaho	224	216	211	170	193	179
Illinois	3319	3170	2984	2884	2693	2677
Indiana	1753	1454	1380	1328	1215	1274
Iowa	524	487	409	403	388	361
Kansas	582	514	480	444	442	439
Kentucky	1577	1328	1294	1187	1147	1102
Louisiana	2024	1907	1900	1831	1767	1700
Maine	240	224	185	191	189	184
Maryland	1067	1055	1058	1042	1014	955
Massachusetts	740	722	753	727	715	698
Michigan	2109	2004	1855	1847	1843	1835
Minnesota	545	582	511	427	461	452
Mississippi	1528	1390	1322	1300	1292	1178
Missouri	1424	1291	1240	1184	1066	1109
Montana	170	152	143	137	115	134
Nebraska	303	282	216	207	245	229
Nevada	214	230	225	196	181	185
New Hampshire	127	121	103	96	115	100
New Jersey	1405	1309	1317	1277	1199	1192
New Mexico	537	517	528	543	476	453
New York	3242	2976	3109	2983	2765	2869
North Carolina	2031	1734	1804	1684	1553	1589
North Dakota	102	74	103	92	68	77
Ohio	2870	2562	2502	2320	2213	2274
Oklahoma	1159	1064	1049	1036	942	953
Oregon	541	509	461	414	418	419
Pennsylvania	2440	2273	2290	2103	1987	2069
Rhode Island	135	143	153	161	134	118
South Carolina	1304	1230	1142	1147	1076	1060
South Dakota	169	152	133	130	115	113
Tennessee	1735	1581	1580	1381	1324	1356
Texas	5959	5931	5749	5597	5618	5636
Utah	399	406	365	349	318	325
Vermont	85	86	87	63	52	65
Virginia	1450	1270	1209	1124	1139	1158
Washington	832	799	710	694	721	746
West Virginia	665	636	541	540	494	432
Wisconsin	802	754	717	739	729	727
Wyoming	167	118	122	110	228	113
U.S. Birth Rate per 1000 Females 16 Years of Age	31.0	30.4	30.9	30.5	30.1	29.7

Source: National Center for Health Statistics

TABLE 8 - Number of Live Births to Females 17 Years of Age

	1980	1981	1982	1983	1984	1985
United States	106,846	101,833	98,723	92,987	89,424	89,313
Alabama	2632	2330	2273	2301	2041	2020
Alaska	178	191	191	192	184	186
Arizona	1609	1498	1511	1487	1520	1521
Arkansas	1587	1474	1429	1385	1299	1263
California	10337	10402	9889	9205	9235	9330
Colorado	1247	1193	1172	1176	1005	1076
Connecticut	834	876	778	741	777	719
Delaware	285	296	266	254	242	226
District of Columbia	377	347	408	347	297	308
Florida	4438	4503	4481	4339	4178	4248
Georgia	3775	3548	3362	3220	3209	3158
Hawaii	333	332	329	320	304	280
Idaho	480	434	438	397	359	328
Illinois	5819	5269	5024	4637	4446	4351
Indiana	2963	2648	2455	2327	2236	2126
Iowa	1054	963	835	760	691	702
Kansas	1075	1017	941	932	752	817
Kentucky	2583	2284	2197	2044	1905	1845
Louisiana	3148	3064	3046	2896	2794	2701
Maine	459	399	394	373	333	367
Maryland	1649	1789	1679	1614	1577	1518
Massachusetts	1360	1362	1331	1279	1308	1283
Michigan	3951	3493	3367	3183	3249	3147
Minnesota	1260	1104	1031	912	984	909
Mississippi	2142	2134	1944	1817	1748	1731
Missouri	2627	2355	2214	2047	2102	1892
Montana	322	329	296	276	256	238
Nebraska	603	509	541	455	398	435
Nevada	362	380	357	356	344	338
New Hampshire	269	252	257	202	191	207
New Jersey	2284	2103	2127	2114	1859	1887
New Mexico	940	875	951	897	780	835
New York	5346	5227	5298	5112	4902	4808
North Carolina	3197	3105	2942	2606	2771	2786
North Dakota	241	217	195	177	181	157
Ohio	4923	4582	4349	4216	3964	3984
Oklahoma	1999	1960	2049	1826	1669	1625
Oregon	1031	960	834	787	781	763
Pennsylvania	4112	4028	3976	3672	3365	3465
Rhode Island	242	285	252	251	226	271
South Carolina	2058	1908	1824	1716	1654	1621
South Dakota	308	284	267	236	231	227
Tennessee	2780	2536	2432	2277	2156	2135
Texas	9732	9490	9745	9164	8892	9152
Utah	871	770	759	656	590	615
Vermont	176	193	167	149	132	143
Virginia	2242	2095	2052	1899	1829	1865
Washington	1468	1488	1396	1285	1153	1352
West Virginia	1195	1055	956	885	829	806
Wisconsin	1640	1601	1460	1364	1307	1371
Wyoming	303	296	256	224	309	175
U.S. Birth Rate per 1000 Females 17 Years of Age	51.8	50.2	50.6	50.4	49.8	50.8

Source: National Center for Health Statistics

PREGNANCY AND INFANT HEALTH

Introduction

Infant and maternal morbidity and mortality depend greatly upon the health and behaviors of the mother, and the quality of health care she receives before and during pregnancy. Research has shown that women who receive early, high-quality prenatal care have better pregnancy outcomes than women who receive late or no prenatal care. While prenatal care is known to improve pregnancy outcomes significantly, barriers to receiving care, including lack of health insurance, transportation, and day care, prevent some women from obtaining it. Nearly one-quarter of all pregnant women, and more than one-third of black pregnant women, did not receive early (first-trimester) prenatal care in 1985.

Low birth weight can have a substantial negative effect on an infant's life. Low birth weight infants are almost 40 times more likely to die in the neonatal period (first 28 days of life) than are normal weight infants.[24] Two-thirds of all neonatal infant deaths and one-fifth of all post-neonatal deaths occur to low birth weight babies.[25]

The 19 objectives that comprise the pregnancy and infant health priority area are intended to reduce morbidity and mortality rates among infants and mothers. The 19 objectives focus on infant mortality, low birth weight, maternal mortality, fetal alcohol syndrome, access to prenatal care, and public and professional education. This report on states' progress focuses on eight of the 19 objectives which relate to infant morality, maternal mortality, access to prenatal care, and low birth weight.

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[24] Institute of Medicine, Preventing Low Birthweight. Washington, D.C.: National Academy Press, 1985, p. 27.

[25] Ibid., p. 29.

Infant Mortality

OBJECTIVE: By 1990, the national infant mortality rate should be reduced to no more than 9 deaths per 1,000 births.

National Progress

According to the *Midcourse Review*, attainment of this objective is uncertain. The infant mortality rate is total deaths of infants under one year of age expressed as a rate per 1,000 live births. Between 1980 and 1985, the infant mortality rate fell from 12.6 deaths per 1,000 births to 10.6. The report projected an infant mortality rate of 9.2 per 1,000 births for the year 1990.

State Progress

Thirty states are projected to meet the objective by 1990. By 1985, six states had already met the infant mortality objective (Hawaii, Minnesota, Nevada, North Dakota, Rhode Island, and Vermont). An additional three states (Maine, Massachusetts, and Wisconsin) were very close to meeting the objective with an infant mortality rate of 9.1 per 1,000 live births.

Since 1980, the majority of states have had declining infant mortality rates. In five states that are unlikely to meet the objective by 1990 (Alabama, the District of Columbia, Louisiana, Mississippi, and North Carolina), infant mortality rates have decreased more than the national annual decline of 3.4 percent. However, infant mortality rates in Wyoming and Delaware increased from 1980 to 1985.

Discussion

The 1985 United States' infant mortality rate of 10.6 deaths per 1,000 infants places the United States 17th internationally among industrialized countries, behind such countries as Japan, Ireland, and East Germany.[26]

Lack of access to prenatal care is one of the major contributing factors to the infant mortality rate in this country. Women who receive early prenatal care improve their chances of having a normal weight, healthy child; inadequate or absent prenatal care increases the likelihood of having a low birth weight baby at heightened risk for many health problems. A report issued by the Alan Guttmacher Institute indicates the infant mortality rate for women receiving no prenatal care is five times that of women receiving care in the first trimester.[27]

Lack of health insurance is one of the major factors contributing to insufficient prenatal care. Twenty-six percent of women of reproductive age (15-44) have no insurance to cover maternity care. At the time of delivery, 15 percent of mothers have no insurance coverage.[28] Other factors currently contributing to the high infant mortality rate include a dramatic rise in the number of births of very small infants (less than 1,000 grams, or 2 pounds, 3 ounces); adolescent pregnancies; lack of education for young and poor mothers; trouble with transportation to health care facilities; and the difficulty of finding providers who will accept women either on Medicaid or without insurance coverage.[29]

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[26] Susan Okie, "Infant Mortality Rate Improvement Is Slowing." Washington, D.C.: Washington Post, March 9, 1988, p. A23.

[27] Alan Guttmacher Institute, Blessed Events and the Bottom Line: Financing Maternity Care in the United States. New York, N.Y.: Alan Guttmacher Institute, 1987, p. 16.

Potential solutions to these problems lie with increasing access to prenatal health care, including providing Medicaid benefits to all pregnant women and infants below the poverty level, and encouraging use of the Medicaid program by easing the application and provider payment processes. While the income eligibility limits for Medicaid vary by state, in 1986 the ceiling for all states averaged about $5,200 -- 56 percent of the poverty level of $9,120 for a family of three.[30] In addition, improved prenatal education, particularly for teenagers, who often bear low birth weight babies and are the least likely of any group to get early prenatal care, would greatly assist in the effort to decrease infant mortality.

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[28] Ibid., p. 44.

[29] *Infant Mortality Rate Improvement Is Slowing*, p. A23.

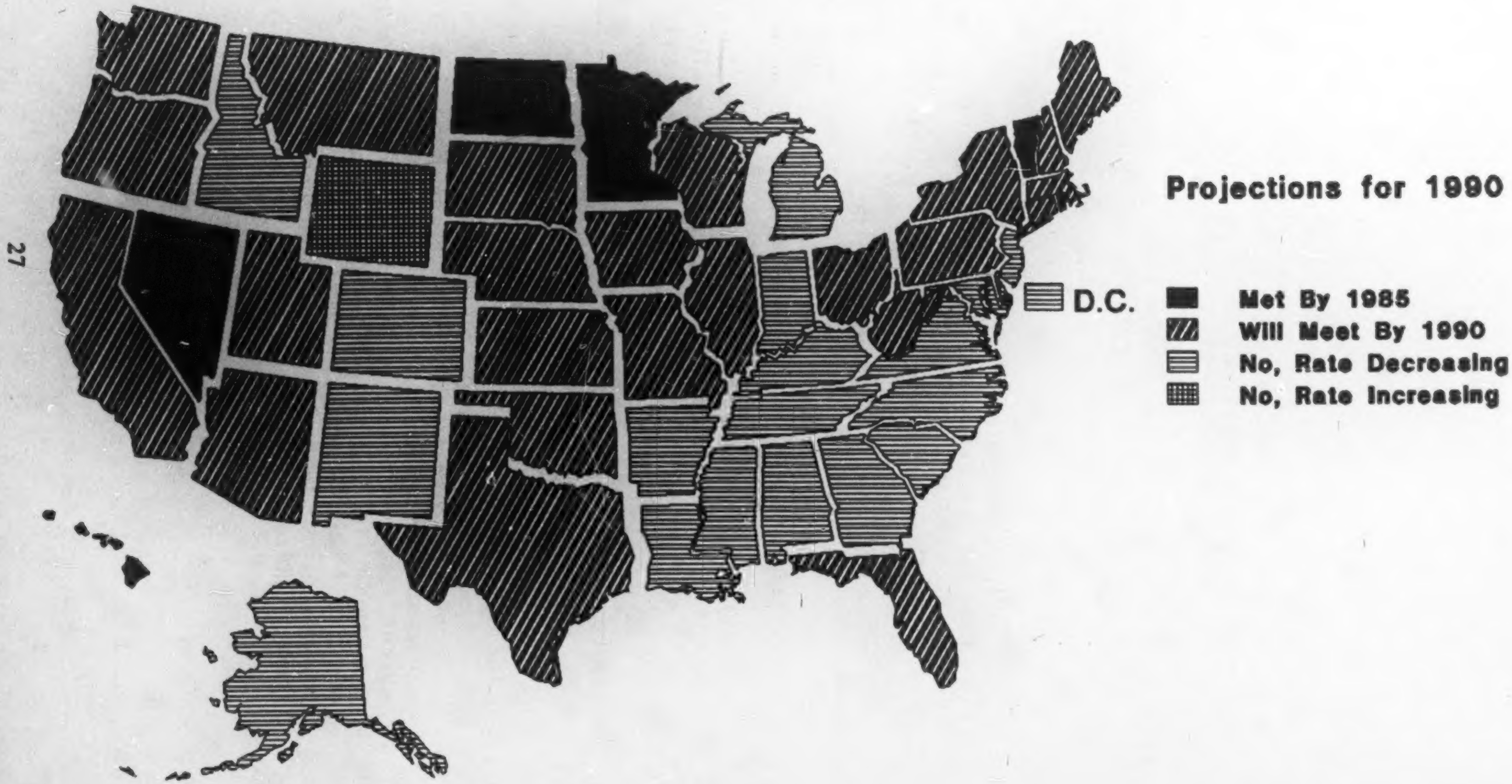
[30] *Blessed Events and the Bottom Line*, p. 30.

TABLE 9 - Infant Mortality Rate, Deaths Per 1,000 Births, All Races

	1980	1981	1982	1983	1984	1985	Average Annual Percentage Change	Is Objective Projected To Be Met?
United States	12.6	11.9	11.5	11.2	10.8	10.6	-3.40%	No
Alabama	15.1	13.0	13.8	13.1	12.9	12.6	-3.56%	No
Alaska	12.3	12.7	11.1	12.4	11.2	10.8	-2.57%	No
Arizona	12.4	11.8	9.3	9.5	9.5	9.7	-4.79%	Yes
Arkansas	12.7	11.9	10.1	10.7	10.9	11.6	-1.80%	No
California	11.1	10.2	9.9	9.7	9.4	9.5	-3.07%	Yes
Colorado	10.1	10.0	9.1	10.0	10.2	9.4	-1.43%	No
Connecticut	11.2	12.1	11.1	10.1	10.4	10.0	-2.24%	Yes
Delaware	13.9	13.4	14.1	10.0	10.8	14.8	1.26%	No
District of Columbia	25.0	25.1	21.2	19.3	21.0	20.8	-3.61%	No
Florida	14.6	13.3	12.8	12.2	10.8	11.3	-5.00%	Yes
Georgia	14.5	13.8	12.7	13.4	12.9	12.7	-2.62%	No
Hawaii	10.3	9.8	8.8	9.4	9.9	8.8	-3.10%	Met
Idaho	10.7	9.2	9.9	10.8	9.8	10.4	-.57%	No
Illinois	14.8	13.9	13.6	12.4	12.1	11.7	-4.59%	Yes
Indiana	11.9	11.7	11.4	11.4	11.1	10.9	-1.74%	No
Iowa	11.8	10.0	10.2	8.9	8.8	9.5	-4.24%	Yes
Kansas	10.4	11.4	10.4	10.3	10.1	9.3	-2.21%	Yes
Kentucky	12.9	12.2	12.0	11.6	11.5	11.2	-2.79%	No
Louisiana	14.3	13.7	13.0	13.5	12.1	11.9	-3.61%	No
Maine	9.2	10.9	9.0	8.7	8.4	9.1	-.22%	Yes
Maryland	14.0	12.6	11.9	11.8	11.8	11.9	-3.20%	No
Massachusetts	10.5	9.7	10.1	9.1	9.0	9.1	-2.82%	Yes
Michigan	12.8	13.1	12.1	11.8	11.7	11.4	-2.29%	No
Minnesota	10.0	10.3	9.5	9.8	8.9	8.8	-2.52%	Met
Mississippi	17.0	15.4	15.4	15.1	14.4	13.7	-4.22%	No
Missouri	12.4	12.6	11.7	10.7	10.4	10.2	-3.83%	Yes
Montana	12.4	10.7	10.1	9.0	8.8	10.3	-3.64%	Yes
Nebraska	11.5	9.9	10.0	9.9	9.6	9.6	-3.55%	Yes
Nevada	10.7	11.2	10.2	10.7	10.5	8.5	-4.50%	Met
New Hampshire	9.9	9.7	11.0	8.6	10.2	9.3	-1.24%	Yes
New Jersey	12.5	10.7	11.7	11.5	10.9	10.6	-3.24%	No
New Mexico	11.5	9.8	11.3	10.0	9.6	10.6	-1.62%	No
New York	12.5	12.4	12.1	11.6	11.0	10.8	-2.88%	Yes
North Carolina	14.5	13.1	13.7	13.2	12.4	11.8	-4.04%	No
North Dakota	12.1	11.2	10.6	8.9	8.1	8.5	-6.82%	Met
Ohio	12.8	12.3	11.5	11.2	10.4	10.3	-4.25%	Yes
Oklahoma	12.7	11.9	12.3	10.9	11.0	10.9	-3.01%	Yes
Oregon	12.2	10.9	10.5	9.6	9.9	9.9	-4.09%	Yes
Pennsylvania	13.2	11.9	11.6	11.3	10.4	11.0	-3.58%	Yes
Rhode Island	11.0	11.8	10.0	11.7	9.9	8.2	-5.71%	Met
South Carolina	15.6	16.1	16.1	15.0	14.7	14.2	-1.86%	No
South Dakota	10.9	11.5	10.2	10.8	10.0	9.9	-1.91%	Yes
Tennessee	13.5	12.6	12.0	12.8	11.8	11.4	-3.32%	No
Texas	12.2	11.6	10.9	11.1	10.5	9.8	-4.29%	Yes
Utah	10.4	9.8	11.0	8.8	9.1	9.6	-1.59%	Yes
Vermont	10.7	7.7	9.3	8.7	8.7	8.5	-4.50%	Met
Virginia	13.6	12.5	12.8	11.9	12.1	11.5	-3.30%	No
Washington	11.8	10.5	10.6	9.5	10.2	10.7	-1.94%	Yes
West Virginia	11.8	13.0	11.4	10.9	11.0	10.7	-1.94%	Yes
Wisconsin	10.3	10.4	9.5	9.6	9.9	9.1	-2.45%	Yes
Wyoming	9.8	11.2	9.8	9.8	11.1	12.2	4.48%	No

Source: National Center for Health Statistics

FIGURE 1.
WILL STATES MEET THE OBJECTIVE FOR INFANT MORTALITY AMONG ALL RACES?


Projections for 1990
▤ D.C.
■ Met By 1985
▨ Will Meet By 1990
▤ No, Rate Decreasing
▦ No, Rate Increasing

OBJECTIVE: By 1990, no racial or ethnic group of the population should have an infant mortality rate in excess of 12 deaths per 1,000 live births.

National Progress

Given the current rate of decline in infant mortality rates, it is unlikely that this objective will be met. While the white infant mortality rate is well below the target of 12 deaths per 1,000 births, nonwhite and black infant mortality rates are well above the target. In 1985, the infant mortality rate for nonwhites was 15.8 deaths per 1,000 births, and for blacks, 18.2 deaths per 1,000 live births. The infant mortality rate for blacks remained at approximately twice the rate for whites from 1980 through 1985. The average annual percentage decline in the infant mortality rate was lower for all nonwhites (2.06 percent) than for blacks (2.66 percent) or whites (2.76 percent).

State Progress

By 1990, ten states are projected to meet the objective for all races. In 1985, all but one of the states had met the objective for whites. Yet for nonwhites, only 10 states, and for blacks, only one state, had met the objective. Since 1980, in all but seven states, infant mortality rates for whites, nonwhites, and blacks have decreased. The infant mortality rate for whites in Alaska, Arkansas, Delaware, and Wyoming was higher in 1985 than in 1980, and the rate among blacks and nonwhites in Connecticut, Massachusetts, and Tennessee was higher in 1985 than in 1980. (States with fewer than 20 deaths were excluded from the comparison because rates are too unstable to be meaningful.)

Several states unlikely to meet the objective by 1990 have infant mortality rates for blacks and nonwhites that have declined more in 1980 through 1985, than rates for the nation as a whole. These states include Alabama, Illinois, Indiana, Louisiana, Mississippi, and Missouri.

Discussion

Many barriers to achieving this objective remain, such as high rates of low birth weight babies, high teenage pregnancy rates, and lack of access to prenatal care for high risk groups.

Hispanic, Native American, and black women are often in high-risk groups and face reduced access to care. Mothers in these groups receive less prenatal care than white women. According to the *Midcourse Review*, in 1984 almost 80 percent of white mothers received prenatal care during the first trimester, while less than 63 percent of black mothers, less than 62 percent of Hispanic mothers, and only 60 percent of American Indian mothers received such care.[31] In addition, one-half of all female migrant workers, composed largely of minorities, have experienced at least one out-of-hospital birth.[32] These alarming statistics point to the need for greater education, outreach, and adequate health services to be provided to minority populations. Further reduction of black infant mortality rates will require concentrated national, state, and local targeted programs.[33]

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[31] *Midcourse Review*, p. 51.

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[32] Children's Defense Fund, A Children's Defense Budget. Washington, D.C.: Children's Defense Fund, 1985, p. 91.

[33] *Midcourse Review*, p. 38.

TABLE 10 - Infant Mortality Rate, Whites

	1980	1981	1982	1983	1984	1985	Average Annual Percentage Change	Is Objective Projected To Be Met?
United States	11.0	10.5	10.1	9.7	9.4	9.3	-3.30%	Met
Alabama	11.6	10.2	10.3	10.3	9.7	10.4	-2.16%	Met
Alaska	9.4	11.1	9.5	10.7	9.3	9.6	.42%	Met
Arizona	11.8	11.0	9.1	8.9	8.8	9.4	-4.45%	Met
Arkansas	10.3	9.8	8.0	9.1	9.2	10.9	1.14%	Met
California	10.6	9.9	9.6	9.4	9.1	9.2	-2.79%	Met
Colorado	9.8	10.1	9.1	10.0	9.9	9.1	-1.47%	Met
Connecticut	10.2	10.6	9.8	8.9	9.2	8.5	-3.58%	Met
Delaware	9.8	10.0	11.2	7.3	8.4	11.6	3.43%	Met
District of Columbia	17.8	17.5	7.5	11.6*	7.2*	10.8*		
Florida	11.8	10.4	10.1	9.9	8.5	9.2	-4.86%	Met
Georgia	10.8	10.3	9.6	9.9	10.0	9.5	-2.53%	Met
Hawaii	11.6	9.6	8.9	10.3	7.7	7.5	-8.35%	Met
Idaho	10.7	9.4	10.2	10.7	9.8	10.5	-.38%	Met
Illinois	11.7	11.2	10.8	9.7	9.5	9.3	-4.49%	Met
Indiana	10.5	10.8	10.4	10.7	10.2	10.0	-.97%	Met
Iowa	11.5	9.8	10.0	8.6	8.8	9.4	-3.95%	Met
Kansas	9.5	10.6	9.9	10.0	9.4	9.0	-1.08%	Met
Kentucky	12.0	11.8	11.4	11.0	10.9	10.3	-3.01%	Met
Louisiana	10.5	10.2	9.4	9.8	8.9	8.6	-3.91%	Met
Maine	9.4	11.1	9.0	8.7	8.4	9.2	-.43%	Met
Maryland	11.6	10.4	8.9	8.9	9.8	9.1	-4.74%	Met
Massachusetts	10.1	9.3	9.6	8.5	8.6	8.2	-4.08%	Met
Michigan	10.6	10.9	9.8	9.6	9.4	9.3	-2.58%	Met
Minnesota	9.6	9.9	9.1	9.6	8.9	8.8	-1.73%	Met
Mississippi	11.1	10.5	10.4	10.7	10.0	9.3	-3.48%	Met
Missouri	11.1	11.7	10.1	9.2	9.0	9.0	-4.11%	Met
Montana	11.8	10.1	10.2	8.6	8.9	9.8	-3.65%	Met
Nebraska	10.7	9.5	9.6	9.5	9.2	9.0	-3.40%	Met
Nevada	10.0	10.4	9.7	10.4	10.5	8.7	-2.75%	Met
New Hampshire	9.9	9.8	11.0	8.6	10.2	9.2	-1.46%	Met
New Jersey	10.3	9.0	9.6	9.5	9.3	8.8	-3.10%	Met
New Mexico	11.3	9.7	11.2	9.8	9.4	10.6	-1.27%	Met
New York	10.8	10.6	10.6	9.9	9.8	9.4	-2.74%	Met
North Carolina	12.1	10.7	10.8	10.5	9.9	9.4	-4.92%	Met
North Dakota	11.7	10.7	9.8	8.5	7.7	8.4	-6.41%	Met
Ohio	11.2	10.8	10.3	9.8	9.3	9.3	-3.65%	Met
Oklahoma	12.1	11.5	12.3	10.7	11.1	10.8	-2.25%	Met
Oregon	12.2	10.8	10.4	9.6	10.0	9.7	-4.48%	Met
Pennsylvania	11.9	10.7	10.3	9.8	8.8	9.5	-4.40%	Met
Rhode Island	10.9	11.5	9.3	11.0	9.4	8.1	-5.77%	Met
South Carolina	10.8	12.4	11.9	11.3	11.0	9.6	-2.33%	Met
South Dakota	9.0	10.2	8.4	8.3	8.8	8.9	-.22%	Met
Tennessee	11.9	10.2	10.1	10.7	9.8	8.9	-5.64%	Met
Texas	11.2	10.7	10.0	10.4	9.7	9.0	-4.28%	Met
Utah	10.5	9.7	11.0	8.9	9.0	9.7	-1.57%	Met
Vermont	10.7	7.6	9.4	8.5	8.8	8.5	-4.50%	Met
Virginia	11.9	10.7	10.7	9.6	9.9	9.3	-4.81%	Met
Washington	11.5	10.2	10.5	9.2	9.9	10.9	-1.07%	Met
West Virginia	11.4	12.7	11.4	10.7	10.8	10.4	-1.82%	Met
Wisconsin	9.7	9.8	8.7	9.0	9.2	8.5	-2.61%	Met
Wyoming	9.3	10.8	9.9	9.9	11.2	12.2	5.58%	No

Source: National Center for Health Statistics
* Based on fewer than 20 deaths

FIGURE 2.
WILL STATES MEET OBJECTIVE FOR INFANT MORTALITY AMONG WHITES?

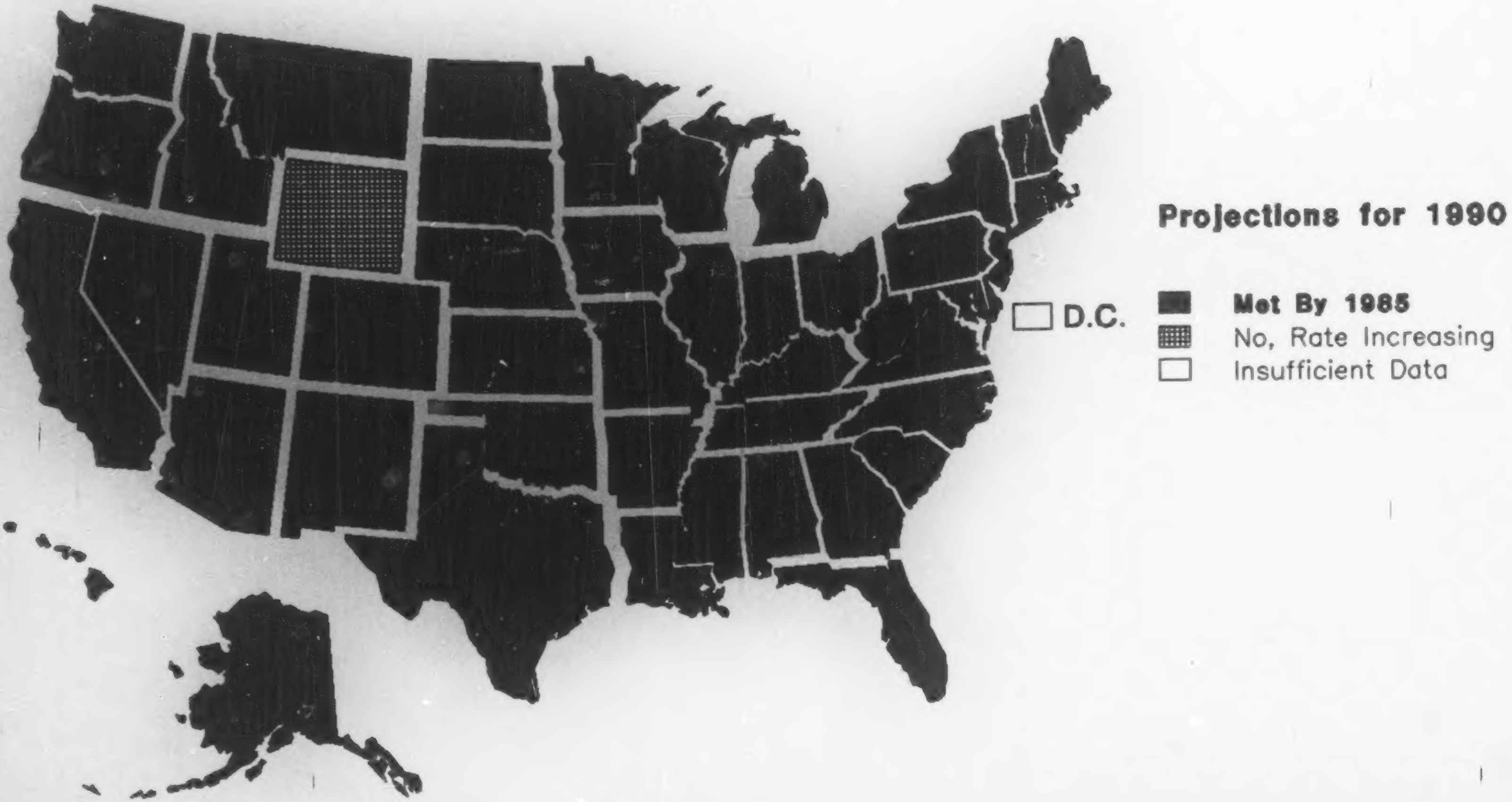

D.C.
Projections for 1990
Met By 1985
No, Rate Increasing
Insufficient Data

TABLE 11 - Infant Mortality Rate, Blacks

	1980	1981	1982	1983	1984	1985	Average Annual Percentage Change	Is Objective Projected To Be Met?
United States	21.4	20.0	19.6	19.2	18.4	18.2	-3.19%	No
Alabama	21.6	20.0	19.6	19.2	19.2	17.0	-4.68%	No
Alaska	19.5*	24.1*	18.0*	21.0*	15.6*	20.5*		
Arizona	18.4	21.1	9.5	20.7	16.9	12.4	-7.59%	Yes
Arkansas	20.0	18.3	16.9	15.6	16.7	14.2	-6.62%	Yes
California	18.0	15.5	15.9	16.7	15.6	16.3	-1.96%	No
Colorado	19.1	11.4	12.4	15.5	17.0	15.9	-3.60%	No
Connecticut	19.1	22.4	21.1	19.6	19.3	20.9	1.82%	No
Delaware	27.9	24.4	23.9	17.3	19.4	25.8	-1.55%	No
District of Columbia	26.7	26.7	24.1	21.3	24.3	23.7	-2.36%	No
Florida	22.8	22.0	21.1	19.3	18.4	17.8	-4.83%	No
Georgia	21.0	19.9	18.2	19.8	18.5	19.0	-1.98%	No
Hawaii	11.8*	9.4*	15.9*	11.3*	17.7*	20.0*		
Idaho	0	11.0*	9.1*	43.0*	11.2*	0		
Illinois	26.3	24.4	24.6	23.1	22.0	21.4	-4.04%	No
Indiana	23.4	19.6	20.2	18.1	19.1	19.5	-3.58%	No
Iowa	27.2	18.8	21.3	21.8	15.1*	12.3*		
Kansas	20.6	20.9	17.7	15.3	18.5	14.4	-6.91%	Yes
Kentucky	22.0	17.1	18.3	18.1	18.4	20.5	-1.40%	No
Louisiana	20.6	19.9	19.2	19.9	17.4	17.2	-3.54%	No
Maine	0	0	21.1*	20.6*	9.7*	12.0*		
Maryland	20.4	18.2	19.3	18.6	17.0	18.9	-1.52%	No
Massachusetts	16.8	16.0	18.6	16.8	14.2	20.8	4.36%	No
Michigan	24.2	24.9	24.6	23.1	23.5	22.4	-1.53%	No
Minnesota	20.0	25.9	18.2	22.5	12.4	15.5	-4.97%	Yes
Mississippi	23.7	20.6	20.8	20.0	19.5	18.9	-4.43%	No
Missouri	20.7	18.7	20.6	19.1	18.3	17.0	-3.86%	No
Montana	0	45.5*	14.5*	28.2*	29.0*	13.2*		
Nebraska	25.2	19.1	16.3	16.6	15.4	17.7	-6.82%	Yes
Nevada	20.6	22.8	18.5	17.9	15.2	11.7	-10.70%	Met
New Hampshire	22.5*	8.9*	29.7*	21.1*	18.9*	29.9*		
New Jersey	21.9	18.3	20.4	19.4	18.4	18.8	-3.01%	No
New Mexico	23.1	15.9*	12.3*	12.6*	7.8*	14.4		
New York	20.0	19.9	18.1	18.1	16.2	16.1	-4.25%	Yes
North Carolina	20.0	19.1	20.6	19.6	18.8	17.8	-2.30%	No
North Dakota	27.5*	8.8*	15.5*	7.4*	7.6*	6.9*		
Ohio	23.0	22.1	19.3	19.5	17.7	16.9	-5.98%	Yes
Oklahoma	21.8	18.4	16.8	14.9	14.8	18.5	-3.23%	Yes
Oregon	15.9*	19.5*	13.3*	16.3*	12.1*	17.3*		
Pennsylvania	23.1	21.1	20.8	21.1	21.3	20.4	-2.46%	No
Rhode Island	0	0	0	0	16.1*	10.7*		
South Carolina	22.9	21.8	22.7	20.9	20.7	21.8	-.98%	No
South Dakota	0	20.6*	11.5*	10.0*	9.9*	0		
Tennessee	19.3	21.2	19.3	20.3	18.9	20.2	.92%	No
Texas	18.8	17.8	16.6	16.3	15.8	15.5	-3.79%	Yes
Utah	27.3*	24.6*	25.2*	6.6*	14.9*	3.3*		
Vermont	0	0	0	87.0*	0	0		
Virginia	19.8	18.8	20.1	20.0	19.6	19.2	-.61%	No
Washington	16.4	15.5	16.9	18.5	21.3	12.6	-5.14%	No
West Virginia	21.5	24.5	14.2*	17.7*	16.1*	20.6		
Wisconsin	18.5	17.5	20.2	16.4	18.7	17.4	-1.22%	No
Wyoming	25.9	9.4	18.5	9.2	9.4*	9.9*		

Source: National Center for Health Statistics
* Based on fewer than 20 deaths

FIGURE 3.
WILL STATES MEET OBJECTIVE FOR INFANT MORTALITY AMONG BLACKS?

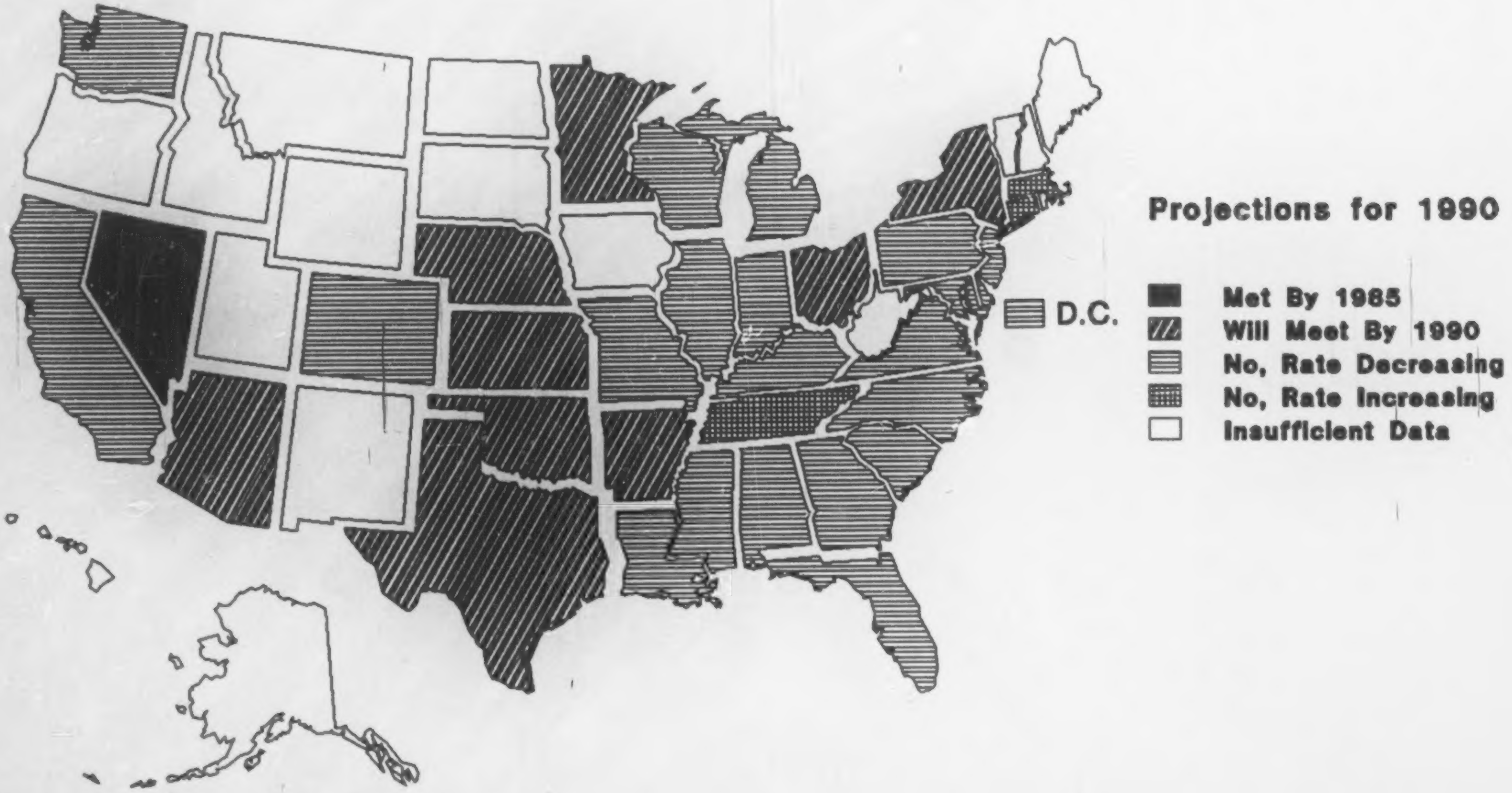
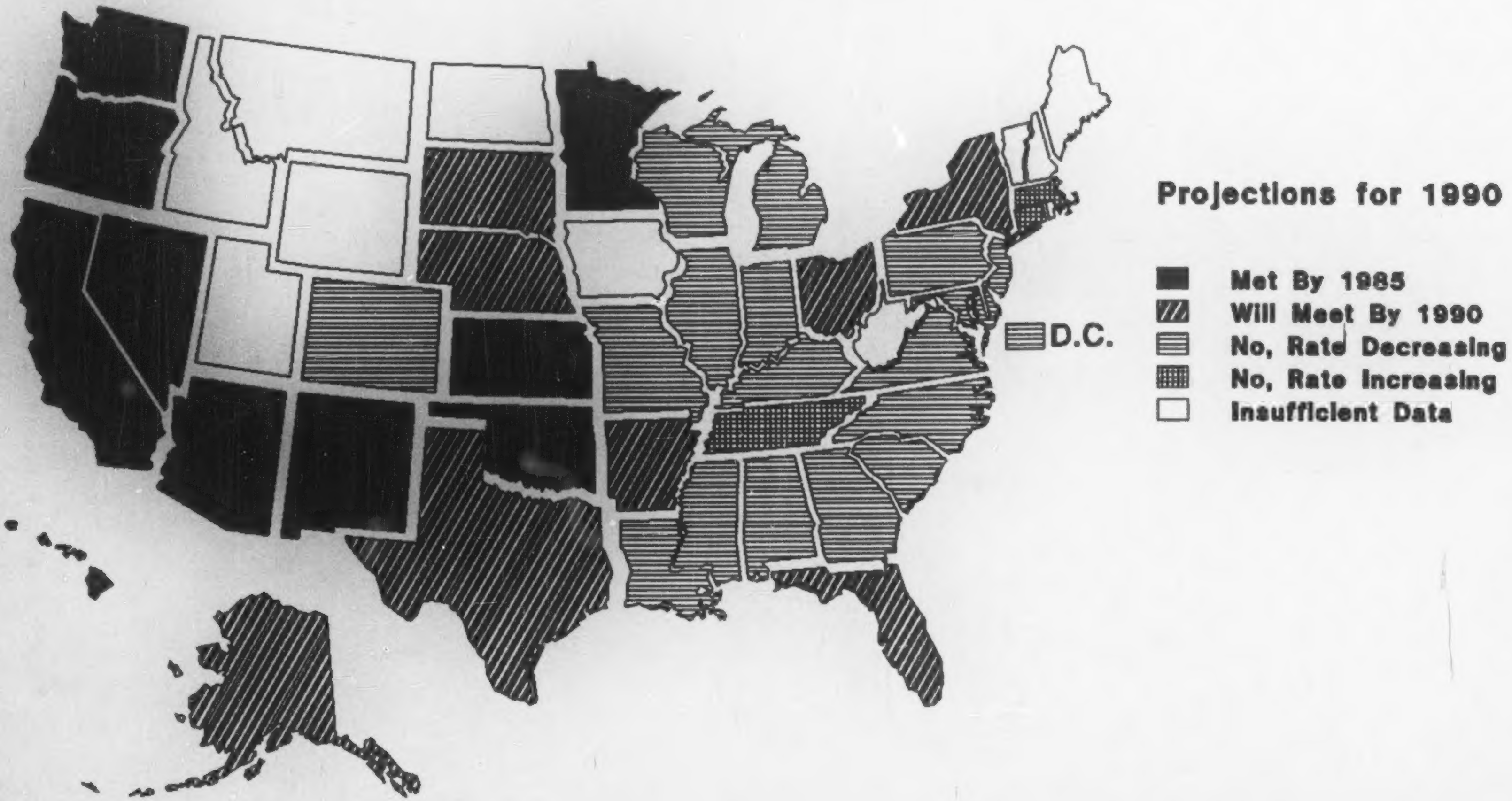

D.C.
Projections for 1990
Met By 1985
Will Meet By 1990
No, Rate Decreasing
No, Rate Increasing
Insufficient Data

TABLE 12 - Infant Mortality Rate, Nonwhites

	1980	1981	1982	1983	1984	1985	Average Annual Percentage Change	Is Objective Projected To Be Met?
United States	17.9	7.5	17.3	16.8	16.1	15.8	-2.46%	No
Alabama	21.4	18.1	20.0	18.3	18.9	16.8	-4.72%	No
Alaska	18.9	16.4	14.9	16.5	16.1	13.8	-6.10%	Yes
Arizona	15.8	15.9	10.3	12.3	13.2	11.3	-6.48%	Met
Arkansas	19.4	17.7	16.1	15.3	16.0	13.8	-6.59%	Yes
California	13.0	11.4	10.8	11.0	10.6	11.0	-3.29%	Met
Colorado	13.7	9.0	8.9	10.7	12.5	13.2	-.74%	No
Connecticut	17.6	21.2	18.9	17.6	17.2	19.1	1.65%	No
Delaware	26.8	23.3	23.2	17.6	18.6	24.8	-1.54%	No
District of Columbia	26.3	26.6	24.3	21.0	24.1	22.9	-2.73%	No
Florida	22.0	21.2	20.4	18.5	17.7	17.2	-4.80%	Yes
Georgia	20.7	19.6	17.9	19.5	18.2	18.5	-2.22%	No
Hawaii	9.9	9.8	8.7	9.1	10.6	9.3	-1.24%	Met
Idaho	10.3	4.9*	3.0*	14.5*	7.8*	7.3*		
Illinois	24.7	22.5	22.8	21.4	20.5	19.9	-4.23%	No
Indiana	22.0	18.6	18.9	17.0	17.8	18.3	-3.62%	No
Iowa	20.8	14.1	15.9	16.2	10.6*	11.6*		
Kansas	17.9	17.9	14.4	13.0	15.8	11.7	-8.15%	Met
Kentucky	20.3	15.9	16.9	16.5	17.3	19.7	-.60%	No
Louisiana	20.3	19.3	18.7	19.3	16.9	16.7	-3.83%	No
Maine	0	3.0*	9.1*	9.3*	9.0*	3.2*		
Maryland	19.1	17.1	18.1	17.5	15.9	17.5	-1.73%	No
Massachusetts	14.3	13.7	14.7	14.1	12.3	16.7	3.15%	No
Michigan	22.7	23.3	22.9	21.7	22.0	20.8	-1.73%	No
Minnesota	16.0	15.7	14.0	13.2	8.7	9.4	-10.09%	Met
Mississippi	23.3	20.6	20.9	19.8	19.2	18.7	-4.30%	No
Missouri	19.5	17.5	19.7	18.2	17.3	16.3	-3.52%	No
Montana	17.7	15.3	9.4*	11.8*	8.3*	13.9		
Nebraska	21.7	15.9	14.9	14.2	14.4	16.9	-4.88%	Yes
Nevada	14.3	15.2	13.1	12.0	10.6	7.3	-12.58%	Met
New Hampshire	9.4*	4.5*	12.7*	8.3*	7.4*	13.2*		
New Jersey	19.9	16.8	19.0	18.3	16.7	16.6	-3.56%	No
New Mexico	12.6	10.3	11.5	11.2	10.6	10.7	-3.22%	Met
New York	17.8	18.2	16.8	16.7	14.8	14.7	-3.75%	Yes
North Carolina	19.4	18.3	19.7	19.0	17.9	17.0	-2.61%	No
North Dakota	16.0*	16.7*	18.5	13.1*	12.5*	9.9*		
Ohio	21.9	20.9	18.5	18.7	16.9	16.1	-5.97%	Yes
Oklahoma	15.3	13.3	12.3	11.3	10.6	11.0	-6.39%	Met
Oregon	12.3	11.5	11.9	10.1	8.4	11.4	-1.51%	Met
Pennsylvania	21.9	19.5	19.4	20.0	20.0	19.1	-2.70%	No
Rhode Island	11.9*	14.3*	15.6	22.2	13.6*	8.9*		
South Carolina	22.5	21.6	22.2	20.5	20.2	21.4	-1.00%	No
South Dakota	22.3	19.7	20.2	23.8	16.1	14.9	-7.75%	Yes
Tennessee	18.8	20.7	18.7	19.8	18.5	19.4	.63%	No
Texas	17.5	16.6	15.2	14.7	14.4	14.0	-4.36%	Yes
Utah	9.2	12.6*	10.9	7.1*	10.9	7.7*		
Vermont	0	16.7*	0	30.3*	0	0		
Virginia	18.4	17.5	18.7	18.3	18.3	17.6	-.89%	No
Washington	13.6	12.7	11.9	11.6	12.4	9.5	-6.92%	Met
West Virginia	19.5	21.7	12.6*	16.6*	15.2*	18.2		
Wisconsin	16.3	16.4	17.1	15.4	16.7	14.9	-1.78%	No
Wyoming	17.9	7.5*	9.5*	7.9*	8.4*	11.5*		

Source: National Center for Health Statistics
* Based on fewer than 20 deaths

FIGURE 4.
WILL STATES MEET OBJECTIVE FOR INFANT MORTALITY AMONG NONWHITES?


D.C.
Projections for 1990
Met By 1985
Will Meet By 1990
No, Rate Decreasing
No, Rate Increasing
Insufficient Data

Neonatal Mortality

OBJECTIVE: By 1990, the neonatal mortality rate (deaths of all infants up to 28 days old per 1,000 live births) should be reduced to no more than 6.5 deaths per 1,000 live births.

National Progress

The neonatal mortality rate decreased from 8.5 deaths per 1,000 live births in 1980 to 7 deaths per 1,000 live births in 1985, although the rate of decline slowed from 1983 through 1985. The *Midcourse Review* estimates that, even at this lower rate of decline, the objective will be met.

State Progress

By 1990, 43 states are projected to meet the objective based on trends in states' neonatal mortality rates from 1980 through 1985. In 1985, 27 states had already met the neonatal mortality objective. In 47 states, the neonatal mortality rate has decreased since 1980.

Discussion

While data regarding this objective are encouraging, it is important that high risk infants continue to have access to life-saving care in neonatal intensive care units. Uninsured newborns represent the most expensive uncompensated care cases that a hospital can have since costs for such care can exceed $1,000 per day. It is possible that cost considerations could prevent uninsured and Medicaid eligible babies from receiving this care.[34] This could make this objective more difficult to achieve.

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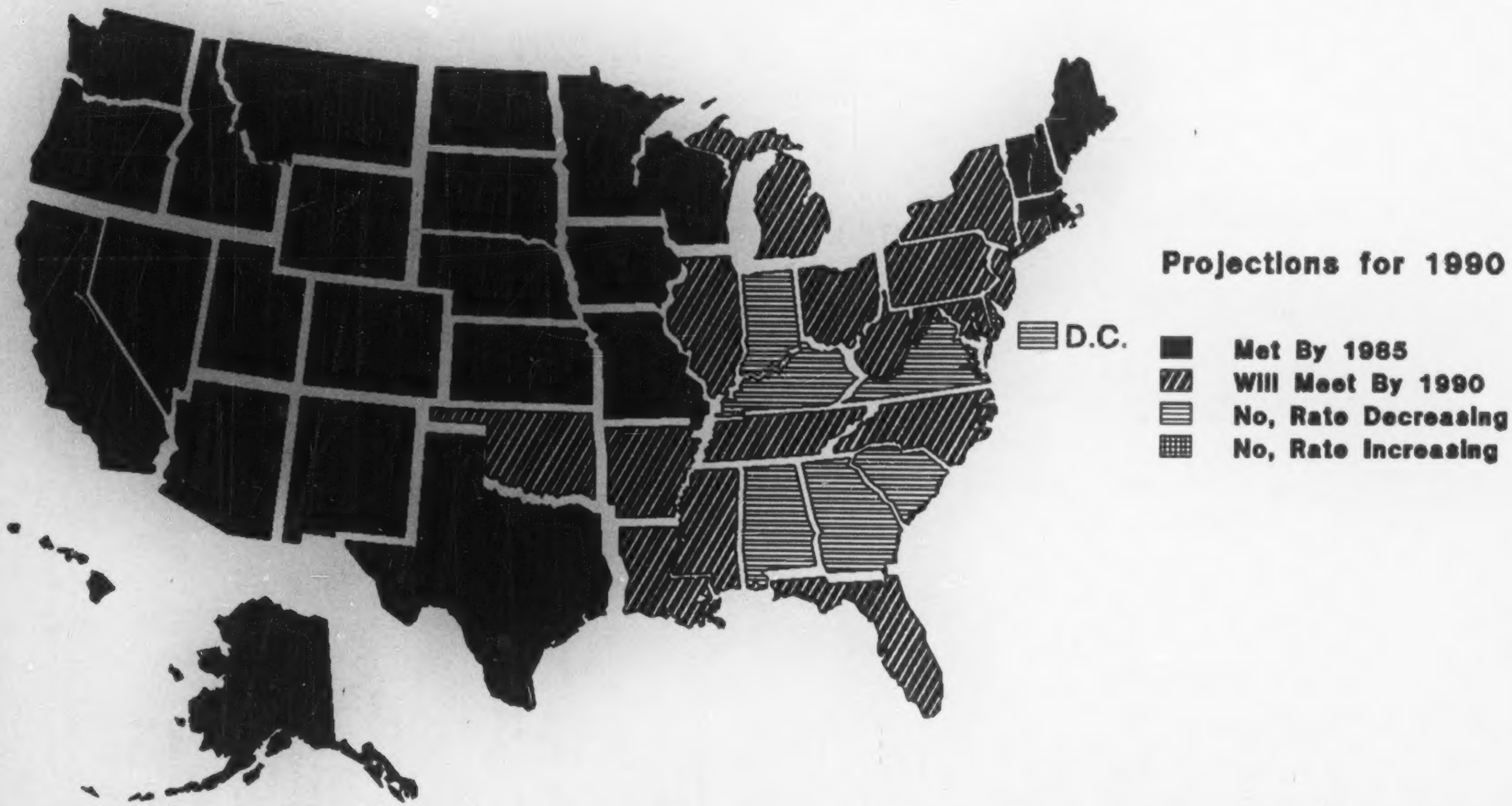
[34] *Perspectives*, February 22, 1988.

TABLE 13 - Neonatal Mortality Rate *

	1980	1981	1982	1983	1984	1985	Average Annual Percentage Change	Is Objective Projected To Be Met?
United States	8.5	8.0	7.7	7.3	7.0	7.0	-3.81%	Yes
Alabama	9.9	8.4	9.2	8.3	8.7	8.3	-3.46%	No
Alaska	6.5	8.0	6.5	6.6	5.7	5.1	-4.74%	Met
Arizona	8.3	7.4	5.7	5.8	5.7	5.9	-6.60%	Met
Arkansas	7.6	7.0	5.8	6.2	6.9	7.1	-1.35%	Yes
California	7.2	6.5	6.3	6.2	6.0	6.0	-3.58%	Met
Colorado	6.6	6.5	5.7	5.9	5.8	5.5	-3.58%	Met
Connecticut	8.1	9.5	8.6	7.8	7.5	7.8	-.75%	Yes
Delaware	10.0	10.0	10.3	6.8	7.6	10.6	1.17%	No
District of Columbia	18.3	19.5	15.6	14.1	16.0	15.9	-2.77%	No
Florida	9.8	8.9	9.0	7.7	6.9	7.4	-5.46%	Yes
Georgia	9.5	8.8	8.3	9.0	8.7	8.6	-1.97%	No
Hawaii	7.2	7.2	5.7	6.3	6.5	5.8	-4.23%	Met
Idaho	6.2	5.3	6.3	5.8	5.0	6.3	.32%	Met
Illinois	10.0	9.8	9.3	8.2	8.1	8.0	-4.36%	Yes
Indiana	7.9	8.0	7.7	7.5	7.1	7.5	-1.03%	No
Iowa	7.9	6.5	6.3	5.6	5.9	5.9	-5.67%	Met
Kansas	6.8	8.1	6.9	6.1	6.5	6.0	-2.47%	Met
Kentucky	8.2	8.0	7.8	7.9	7.4	7.5	-1.77%	No
Louisiana	10.0	9.3	8.4	9.0	8.0	7.7	-5.09%	Yes
Maine	5.8	6.8	6.2	5.9	5.1	6.5	2.31%	Met
Maryland	10.2	9.1	8.4	8.1	8.1	8.2	-4.27%	Yes
Massachusetts	7.7	6.9	7.6	6.4	6.1	6.5	-3.33%	Met
Michigan	8.9	9.1	8.7	8.0	8.1	7.8	-2.60%	Yes
Minnesota	6.2	6.6	5.9	6.2	5.5	5.4	-2.73%	Met
Mississippi	11.0	10.5	10.2	9.3	9.0	8.4	-5.25%	Yes
Missouri	8.2	8.7	7.5	7.2	6.4	6.5	-4.54%	Met
Montana	7.7	6.3	6.5	4.3	4.5	5.0	-8.27%	Met
Nebraska	7.5	6.1	6.9	6.5	6.2	6.2	-3.74%	Met
Nevada	6.7	6.5	6.3	5.8	6.0	4.8	-6.45%	Met
New Hampshire	7.5	6.3	8.6	5.8	7.1	6.3	-3.43%	Met
New Jersey	8.6	7.3	8.2	7.8	7.5	7.2	-3.49%	Yes
New Mexico	7.3	5.9	6.6	5.5	6.0	6.3	-2.90%	Met
New York	8.7	8.6	8.5	7.8	7.5	7.4	-3.19%	Yes
North Carolina	10.0	8.8	9.5	8.7	8.1	7.8	-4.85%	Yes
North Dakota	7.7	7.3	6.8	6.1	4.5	5.4	-6.85%	Met
Ohio	8.7	8.6	7.9	7.7	6.8	6.7	-5.09%	Yes
Oklahoma	8.1	7.2	7.4	6.8	7.0	6.8	-3.44%	Yes
Oregon	7.0	6.9	6.2	5.4	4.8	5.3	-5.41%	Met
Pennsylvania	9.7	8.5	8.2	7.9	7.2	7.6	-4.76%	Yes
Rhode Island	8.5	9.3	8.0	9.1	7.0	6.0	-6.73%	Met
South Carolina	10.9	10.9	10.7	9.8	9.8	10.0	-1.71%	No
South Dakota	5.7	7.6	7.0	5.8	5.5	5.4	-1.08%	Met
Tennessee	9.1	8.9	8.0	8.4	8.0	7.5	-3.79%	Yes
Texas	8.2	7.6	7.0	6.9	6.6	6.2	-5.44%	Met
Utah	6.6	5.8	6.8	5.4	5.6	5.4	-3.93%	Met
Vermont	6.0	4.3	6.1	6.2	5.5	5.4	-2.09%	Met
Virginia	9.8	9.0	9.3	8.3	8.7	8.1	-3.74%	No
Washington	7.0	6.3	6.0	5.4	5.4	6.2	-2.40%	Met
West Virginia	8.0	8.8	7.2	7.0	7.1	7.3	-1.81%	Yes
Wisconsin	6.7	6.9	6.2	6.3	6.3	5.6	-3.52%	Met
Wyoming	6.2	8.1	5.9	5.1	7.1	6.4	.64%	Met

Source: National Center for Health Statistics
* Deaths of infants up to 28 days of age per 1,000 births

FIGURE 5.
WILL STATES MEET THE OBJECTIVE FOR NEONATAL MORTALITY?


D.C.
Projections for 1990
■ Met By 1985
▨ Will Meet By 1990
▤ No, Rate Decreasing
▦ No, Rate Increasing

Perinatal Mortality

OBJECTIVE: By 1990, the perinatal mortality rate should be reduced to no more than 5.5 deaths per 1,000 live births. The perinatal mortality rate is expressed as the number of deaths (fetal deaths over 28 weeks gestation plus infant deaths within seven days of birth) per 1,000 live births and fetal deaths over 28 weeks gestation.

National Progress

While the perinatal mortality rate declined from 13.3 in 1980 to 10.7 in 1985, the objective will not be met according to the *Midcourse Review*. The report projected that by 1990 the perinatal mortality rate will be 8.4.

State Progress

Six states are projected to meet the objective by 1990, although, as of 1985, no state had met the objective. With the exception of Delaware, Idaho, Vermont, and Wyoming, state perinatal mortality rates have declined since 1980. Sixteen states, although unlikely to meet the objective by 1990, have perinatal mortality rates that have declined more than the annual national average of 4.26 percent.

Discussion

This objective is not being met due to the same factors that impede reduction of all birth mortality rates -- high-risk pregnancies and lack of access to adequate care. According to a 1985 report by the Children's Defense Fund, babies born to women who receive no prenatal care are three times more likely to be born at low birth weight, substantially increasing the chances that the infant will suffer serious handicapping conditions or death.[35]

An additional barrier to achieving this objective is the decline in the number of hospitals and doctors offering life-saving services to newborns. Apparently, at least partially in response to the large number of families who cannot pay the costs of caring for newborns, some hospitals have discontinued their newborn intensive care services entirely.[36] Additionally, according to a 1983 survey by the American College of Obstetricians and Gynecologists, 17.6 percent of obstetricians reported they had decreased their level of high-risk obstetrical care.[37]

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[35] *A Children's Defense Budget*, p. 81.

[36] Ibid., p. 86.

[37] *Midcourse Review*, p. 37.

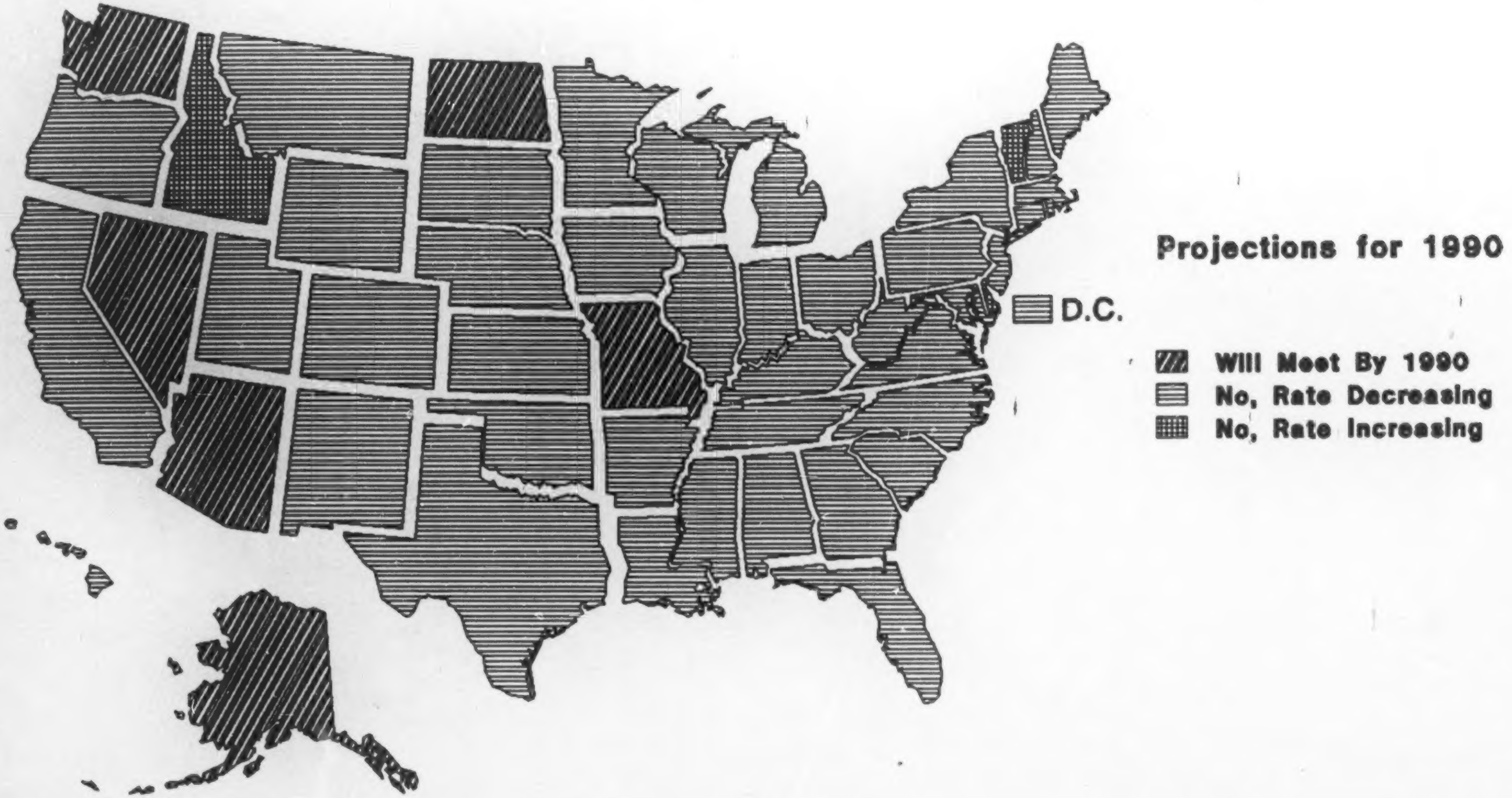
TABLE 14 - Perinatal Mortality Rate*

	1980	1981	1982	1983	1984	1985	Average Annual Percentage Change	Is Objective Projected To Be Met?
United States	13.3	12.6	12.3	11.6	11.0	10.7	-4.26%	No
Alabama	15.9	14.8	14.3	13.8	13.8	13.3	-3.51%	No
Alaska	11.1	10.3	9.6	8.7	6.7	8.1	-6.11%	Yes
Arizona	12.3	11.4	10.0	9.3	8.9	9.5	-5.03%	Yes
Arkansas	14.1	12.2	11.1	10.9	10.7	11.2	-4.50%	No
California	11.9	11.1	10.6	10.2	9.8	9.6	-4.20%	No
Colorado	11.3	10.9	10.2	10.5	10.0	9.5	-3.41%	No
Connecticut	11.6	13.6	12.7	10.2	11.0	10.8	-1.42%	No
Delaware	13.2	17.0	16.0	12.2	13.3	13.8	.89%	No
District of Columbia	25.7	26.7	18.7	19.5	22.8	20.2	-4.70%	No
Florida	15.1	14.4	14.9	12.6	11.7	11.6	-5.14%	No
Georgia	15.1	14.6	14.3	14.1	12.9	12.9	-3.10%	No
Hawaii	11.3	10.2	10.5	9.4	9.2	8.8	-4.88%	No
Idaho	10.2	9.6	10.3	10.2	8.9	10.4	.39%	No
Illinois	15.6	14.8	14.4	12.7	12.6	12.4	-4.49%	No
Indiana	12.9	13.0	12.4	12.3	11.5	11.4	-2.44%	No
Iowa	12.7	10.5	10.0	9.1	10.3	8.8	-7.07%	No
Kansas	11.8	12.2	11.7	10.3	10.5	9.6	-4.04%	No
Kentucky	13.9	13.7	12.8	12.7	11.1	12.0	-2.90%	No
Louisiana	15.4	14.0	14.0	13.9	13.1	12.5	-4.09%	No
Maine	11.1	9.6	10.0	9.8	9.0	9.4	-3.27%	No
Maryland	14.6	13.7	13.0	12.3	13.2	12.3	-3.37%	No
Massachusetts	10.6	10.8	11.7	10.2	9.9	9.7	-1.76%	No
Michigan	12.9	13.0	12.2	11.1	10.9	10.6	-3.85%	No
Minnesota	9.8	10.7	10.0	10.1	9.4	9.3	-1.04%	No
Mississippi	18.1	17.4	16.8	16.6	14.7	13.8	-5.28%	No
Missouri	13.7	13.2	12.7	11.4	10.3	9.6	-6.87%	Yes
Montana	10.9	9.6	9.8	8.2	8.2	9.4	-2.92%	No
Nebraska	12.1	10.7	12.2	11.3	9.9	10.0	-3.74%	No
Nevada	11.6	11.3	9.7	9.3	8.3	8.0	-7.16%	Yes
New Hampshire	10.4	9.5	12.6	9.3	9.9	9.3	-2.21%	No
New Jersey	14.0	11.5	13.2	12.0	11.7	11.1	-4.54%	No
New Mexico	12.3	9.0	10.5	9.7	9.4	9.5	-5.03%	No
New York	14.3	13.3	13.4	12.6	11.5	11.5	-4.26%	No
North Carolina	15.9	14.5	14.7	13.6	12.9	11.9	-5.63%	No
North Dakota	11.6	10.6	10.8	10.1	8.0	8.0	-7.16%	Yes
Ohio	13.5	13.2	12.6	11.8	10.6	10.7	-4.54%	No
Oklahoma	14.1	12.6	12.1	11.6	11.2	10.5	-5.73%	No
Oregon	10.1	10.2	9.5	9.2	8.0	8.2	-4.08%	No
Pennsylvania	14.0	12.9	12.7	12.2	11.3	11.6	-3.69%	No
Rhode Island	13.0	12.9	11.0	11.5	10.2	9.4	-6.28%	No
South Carolina	17.6	16.7	16.9	15.4	15.3	14.8	-3.41%	No
South Dakota	11.2	11.2	11.4	11.1	9.7	9.5	-3.24%	No
Tennessee	14.5	14.3	12.8	13.1	12.3	11.6	-4.36%	No
Texas	12.4	11.9	11.5	11.3	10.7	9.9	-4.40%	No
Utah	10.3	9.7	10.0	8.9	8.8	8.3	-4.23%	No
Vermont	8.6	8.2	8.8	8.2	9.9	9.2	1.36%	No
Virginia	15.2	14.2	14.4	12.6	12.7	12.1	-4.46%	No
Washington	11.7	10.4	10.2	9.4	8.6	8.4	-6.41%	Yes
West Virginia	13.0	14.7	13.2	12.9	11.3	11.5	-2.42%	No
Wisconsin	11.1	11.1	10.1	10.0	10.2	9.0	-4.11%	No
Wyoming	10.2	12.9	11.4	9.7	10.7	10.2	.00%	No

Source: National Center for Health Statistics

* Fetal deaths over 28 weeks gestation plus infant deaths within seven days of birth per 1,000 live births

FIGURE 6.
WILL STATES MEET OBJECTIVE FOR PERINATAL MORTALITY?


D.C.
Projections for 1990
▨ Will Meet By 1990
▤ No, Rate Decreasing
▦ No, Rate Increasing

Access to Prenatal Care

OBJECTIVE: By 1990, the proportion of women in any racial or ethnic group who obtain no prenatal care during the first trimester of pregnancy should not exceed 10 percent.

National Progress

Based on the progress from 1980 to 1985, it is unlikely this objective will be met by 1990. From 1980 to 1985, there was virtually no change in the percentage of pregnant women who received early prenatal care. In 1980, 76.3 percent of women of all races received early prenatal care compared to 76.2 percent in 1985. The *Midcourse Review* estimates that by 1990, 78.3 percent of all women, 81.2 percent of white women, and 64.9 percent of minority women will receive early prenatal care. For 1985, 79.4 percent of white women, 61.8 percent of black women, and 63.7 percent of nonwhite women received early prenatal care.

State Progress

As of 1985, no state had met this objective and, by 1990, no state is projected to meet this objective for all races. Twenty-one states had lower percentages of women receiving early prenatal care in 1985 than in 1980. Nineteen states had lower percentages of white women and 24 states had lower percentages of black and nonwhite women receiving early prenatal care in 1985 than in 1980.

Discussion

Populations that are most likely to receive inadequate prenatal care are the unmarried, teenagers, the least-educated, blacks, Hispanics, and the poor.[38] Many types of barriers hinder women's access to prenatal care, several of which are related to the medical care system. These barriers include: financial constraints, including inadequate insurance; inadequate supply of maternity care providers, especially those willing to serve high-risk women; and insufficient prenatal care services in some sites used by high-risk populations, such as community health centers and health departments.[39] Other barriers unrelated to the medical system include lack of transportation and day care; experiences, attitudes, and beliefs among women that hinder their motivation to seek services; and lack of outreach to recruit hard-to-reach women into care.[40] Rising numbers of uninsured Americans, coupled with tighter government spending on health care benefits and services, have provided greater challenges to meeting this objective.[41]

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[38] *Blessed Events and the Bottom Line*, pp. 14-15.

[39] *Preventing Low Birthweight*, p. 153.

[40] Ibid., p. 153.

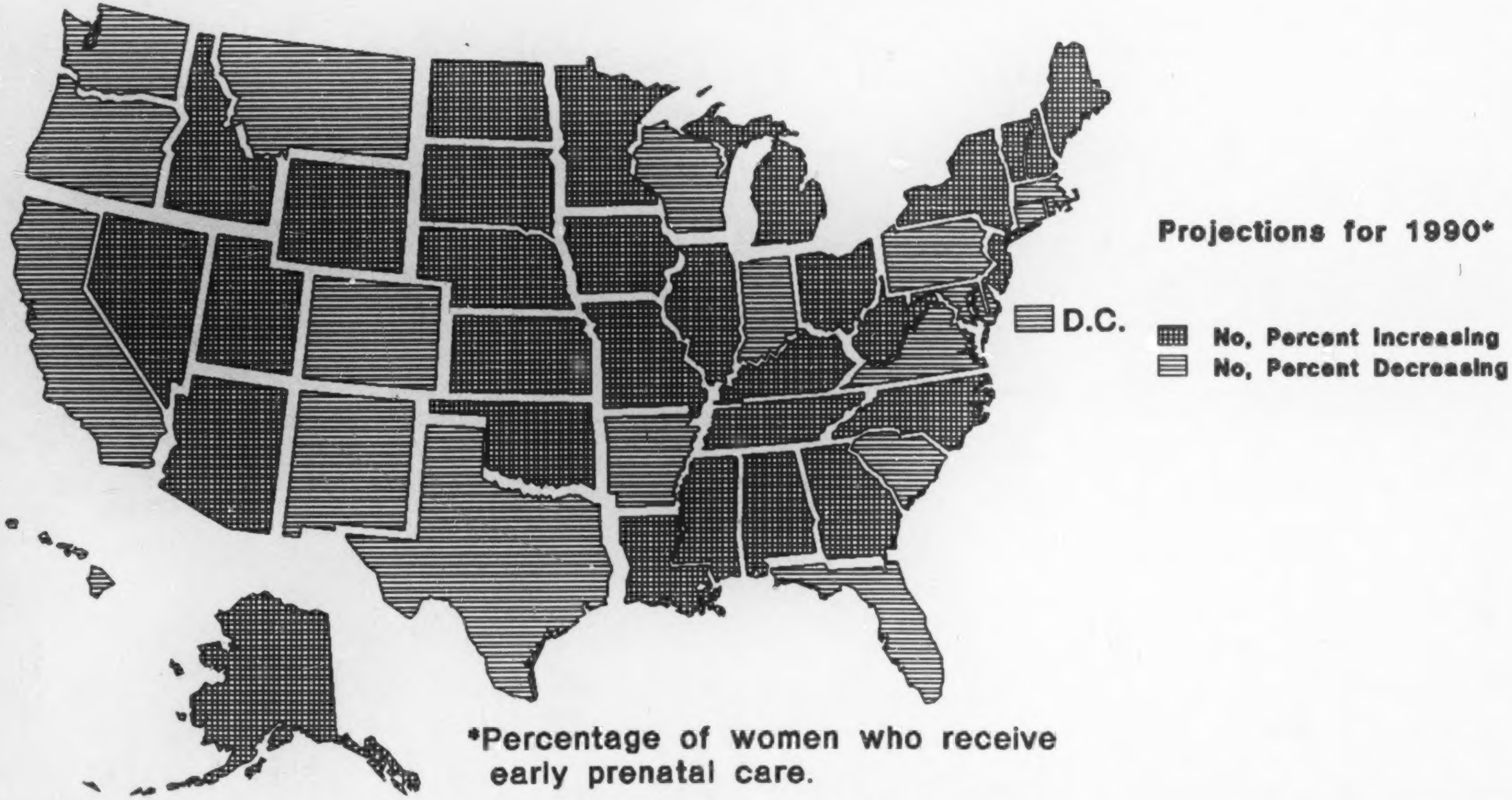
[41] *Blessed Events and the Bottom Line*, p. 49.

TABLE 15 - Percentage of Births to Women Who Began Prenatal Care In the First Trimester of Pregnancy, All Races

	1980	1981	1982	1983	1984	1985	Average Annual Percentage Change	Is Objective Projected To Be Met?
United States	76.3	76.4	76.1	76.2	76.5	76.2	-.02%	No
Alabama	71.7	72.3	72.5	73.2	73.6	73.2	.42%	No
Alaska	75.1	75.0	76.6	75.2	75.7	75.3	.06%	No
Arizona	70.2	73.6	74.2	72.6	71.7	71.3	.31%	No
Arkansas	70.1	70.1	68.9	68.1	68.9	69.0	-.32%	No
California	76.5	76.9	77.1	77.1	76.9	75.7	-.22%	No
Colorado	78.9	78.2	76.1	76.4	77.2	77.6	-.32%	No
Connecticut	86.8	86.1	85.8	85.7	85.6	85.8	-.23%	No
Delaware	78.6	78.6	78.2	76.6	78.0	77.8	-.20%	No
District of Columbia	67.5	65.6	61.4	59.0	60.3	59.4	-2.52%	No
Florida	69.3	69.3	67.9	68.2	67.7	67.9	-.41%	No
Georgia	74.5	74.0	73.0	75.2	75.8	74.8	.08%	No
Hawaii	76.5	76.9	74.8	74.1	75.8	75.4	-.29%	No
Idaho	75.6	76.4	75.8	75.7	76.5	76.2	.15%	No
Illinois	75.4	76.5	76.9	77.8	77.9	77.9	.67%	No
Indiana	78.7	78.5	77.7	77.2	78.0	77.4	-.33%	No
Iowa	84.3	84.9	84.4	85.6	85.3	85.4	.27%	No
Kansas	80.8	80.6	80.4	81.2	81.5	81.1	.08%	No
Kentucky	72.1	73.9	74.9	75.0	75.6	76.2	1.10%	No
Louisiana	78.1	77.8	77.3	78.3	77.6	78.3	.05%	No
Maine	80.9	81.5	81.6	84.0	82.8	82.0	.28%	No
Maryland	80.9	79.5	78.7	78.5	79.3	80.0	-.23%	No
Massachusetts	88.9	89.1	88.0	85.6	85.6	85.1	-.86%	No
Michigan	80.0	80.5	80.9	81.2	81.4	81.7	.43%	No
Minnesota	77.9	77.6	77.9	79.1	79.9	79.5	.40%	No
Mississippi	74.8	74.4	74.1	74.6	74.8	75.0	.06%	No
Missouri	79.3	78.9	79.1	79.2	79.9	80.3	.25%	No
Montana	79.2	79.5	78.9	79.2	79.0	78.4	-.20%	No
Nebraska	79.6	79.8	79.7	80.6	79.9	80.4	.21%	No
Nevada	73.6	75.8	74.1	74.1	75.8	74.5	.23%	No
New Hampshire	84.1	84.5	83.9	84.8	84.6	84.7	.13%	No
New Jersey	79.1	79.6	80.0	80.7	82.0	81.8	.68%	No
New Mexico	60.1	60.0	60.9	61.5	61.2	58.6	-.49%	No
New York	71.9	71.2	71.0	71.2	72.2	72.4	.13%	No
North Carolina	76.6	76.7	77.5	77.8	78.2	77.9	.35%	No
North Dakota	78.2	79.6	79.3	81.5	82.0	82.7	1.12%	No
Ohio	80.5	80.3	81.0	81.0	81.7	82.2	.42%	No
Oklahoma	68.0	68.1	67.6	67.4	69.4	70.6	.75%	No
Oregon	78.0	77.6	76.9	77.5	77.1	75.1	-.74%	No
Pennsylvania	79.5	79.6	79.4	79.0	78.9	78.8	-.19%	No
Rhode Island	87.4	88.0	87.0	84.7	85.5	86.0	-.33%	No
South Carolina	70.5	68.4	66.9	66.5	67.6	68.3	-.65%	No
South Dakota	69.1	71.5	70.9	72.1	72.7	73.4	1.21%	No
Tennessee	74.4	74.3	73.8	74.7	75.7	75.1	.18%	No
Texas	69.1	68.4	68.1	67.7	68.1	67.6	-.43%	No
Utah	81.4	81.1	81.8	82.3	82.0	81.7	.08%	No
Vermont	78.0	77.6	81.6	82.9	82.3	80.0	.50%	No
Virginia	81.2	81.3	80.9	80.6	80.3	79.8	-.34%	No
Washington	79.6	79.7	77.6	77.6	78.1	77.8	-.46%	No
West Virginia	69.0	69.8	70.5	72.0	71.2	71.5	.72%	No
Wisconsin	83.2	83.7	83.6	83.8	84.1	82.9	-.07%	No
Wyoming	75.9	78.1	78.6	78.7	80.6	79.4	.92%	No

Source: National Center for Health Statistics

FIGURE 7.
WILL STATES MEET OBJECTIVE FOR PRENATAL CARE AMONG ALL RACES?


D.C.
Projections for 1990*
▦ No, Percent Increasing
▤ No, Percent Decreasing

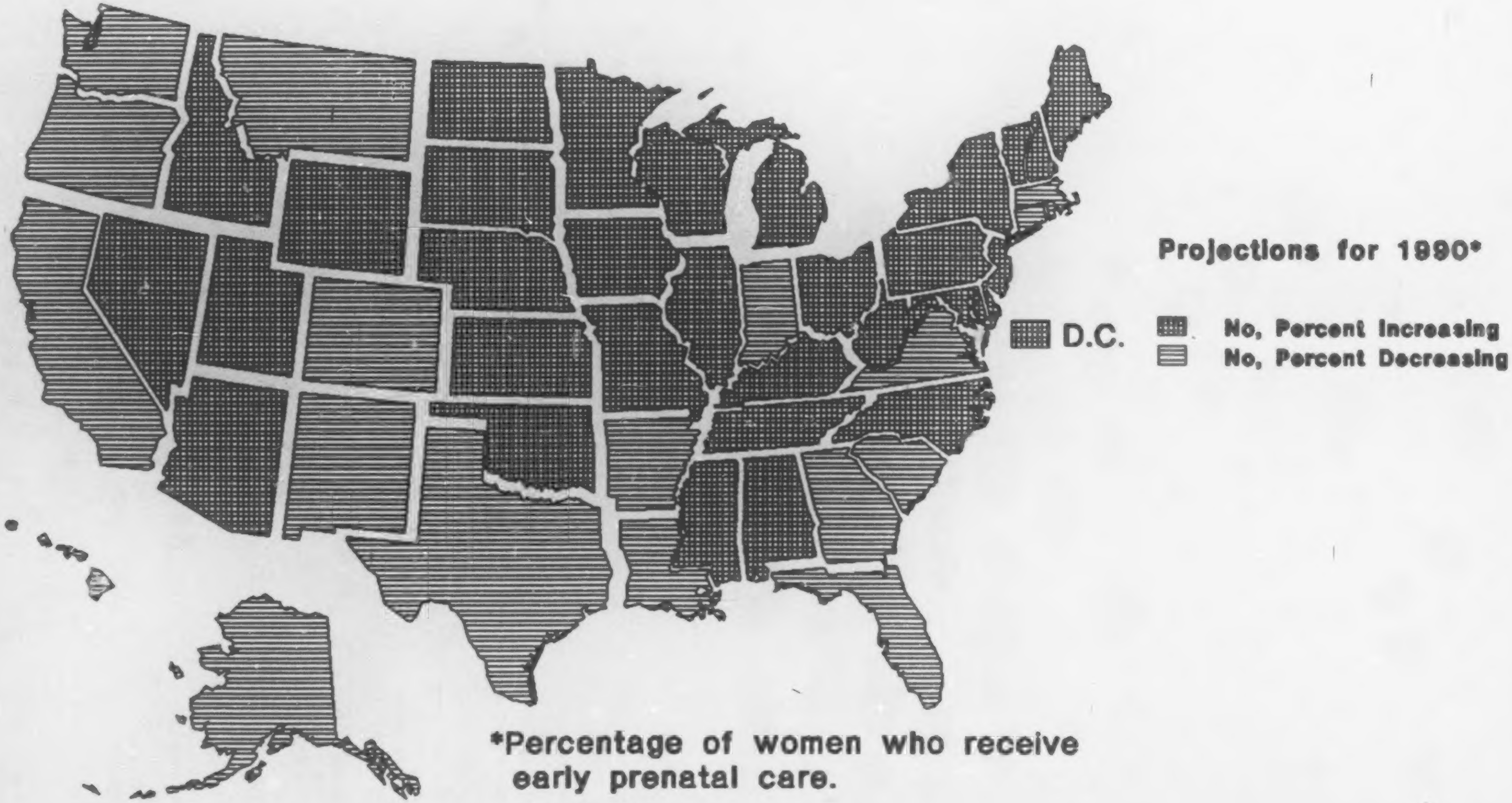
*Percentage of women who receive early prenatal care.

TABLE 16 - Percentage of Births to Women Who Began Prenatal Care in the First Trimester of Pregnancy, Whites

	1980	1981	1982	1983	1984	1985	Average Annual Percentage Change	Is Objective Projected To Be Met?
United States	79.3	79.4	79.3	79.4	79.6	79.4	.03%	No
Alabama	80.0	80.9	81.2	81.3	81.5	81.0	.25%	No
Alaska	78.5	79.2	80.1	79.0	78.8	78.4	-.02%	No
Arizona	72.3	75.7	76.0	74.8	74.1	73.5	.33%	No
Arkansas	75.3	75.1	74.4	73.9	73.8	74.2	-.31%	No
California	76.8	77.2	77.5	77.6	77.5	76.4	-.10%	No
Colorado	79.7	79.1	77.1	77.2	77.9	78.5	-.32%	No
Connecticut	89.0	88.6	88.4	88.7	88.5	88.6	-.08%	No
Delaware	82.5	82.5	82.6	82.1	81.9	82.6	.02%	No
District of Columbia	78.5	78.9	76.0	76.0	75.7	78.9	.10%	No
Florida	75.2	75.2	73.7	74.1	73.3	73.9	-.34%	No
Georgia	81.7	81.2	80.7	81.8	82.6	81.2	-.12%	No
Hawaii	79.3	80.2	75.9	75.1	78.5	78.3	-.26%	No
Idaho	75.9	76.8	76.1	76.0	76.8	76.6	.19%	No
Illinois	78.7	79.9	80.7	81.5	81.6	81.7	.76%	No
Indiana	80.4	80.2	79.6	79.5	79.9	79.5	-.23%	No
Iowa	84.8	85.4	84.9	86.1	86.0	85.9	.26%	No
Kansas	81.9	82.1	82.1	82.8	83.1	82.6	.17%	No
Kentucky	74.1	75.6	76.6	76.6	77.2	77.6	.92%	No
Louisiana	85.3	85.2	85.2	85.9	85.8	85.2	-.02%	No
Maine	81.1	81.7	82.0	84.1	82.9	82.1	.26%	No
Maryland	85.4	84.7	84.2	84.3	85.4	86.0	.14%	No
Massachusetts	89.6	89.9	88.8	86.6	86.6	86.4	-.72%	No
Michigan	82.0	82.5	82.9	83.3	83.3	83.9	.45%	No
Minnesota	79.1	79.2	79.6	80.6	81.5	81.2	.53%	No
Mississippi	85.3	84.6	85.0	85.1	85.3	85.3	.00%	No
Missouri	81.4	81.2	81.2	81.7	82.3	82.6	.29%	No
Montana	81.1	81.8	81.1	81.6	81.7	81.0	-.04%	No
Nebraska	80.6	80.9	81.1	81.9	81.6	81.8	.30%	No
Nevada	76.2	78.1	76.6	76.7	77.9	77.2	.25%	No
New Hampshire	84.1	84.6	84.1	84.9	84.7	84.6	.13%	No
New Jersey	83.5	83.8	83.9	84.6	85.5	85.2	.41%	No
New Mexico	63.4	63.1	63.6	64.2	63.5	61.1	-.74%	No
New York	78.2	77.1	77.5	77.5	78.2	78.2	.00%	No
North Carolina	83.2	83.3	83.7	83.9	84.0	83.6	.10%	No
North Dakota	80.0	81.0	81.2	82.8	83.5	84.3	1.05%	No
Ohio	82.5	82.5	83.2	83.5	84.1	84.6	.50%	No
Oklahoma	72.0	72.3	71.5	71.6	73.6	74.2	.61%	No
Oregon	78.8	78.7	77.9	78.3	77.8	75.9	-.75%	No
Pennsylvania	82.3	82.5	82.3	81.9	81.9	82.5	.04%	No
Rhode Island	88.4	89.2	88.3	86.9	87.4	87.9	-.12%	No
South Carolina	79.5	77.7	75.7	76.0	76.7	77.4	-.52%	No
South Dakota	73.1	75.6	75.3	76.8	76.7	77.5	1.17%	No
Tennessee	77.7	77.8	77.5	78.3	79.5	78.6	.22%	No
Texas	70.9	70.1	69.8	69.3	69.6	69.2	-.48%	No
Utah	82.1	81.9	82.6	83.0	82.9	82.8	.16%	No
Vermont	78.0	77.7	81.6	83.0	82.4	80.1	.52%	No
Virginia	84.1	84.3	84.3	84.4	84.4	83.9	-.04%	No
Washington	80.9	80.5	79.2	79.2	79.5	79.3	-.40%	No
West Virginia	69.6	70.5	71.3	72.7	71.9	72.2	.73%	No
Wisconsin	84.7	85.3	85.2	85.6	86.1	85.2	.13%	No
Wyoming	76.5	78.5	79.1	79.3	81.0	80.2	.95%	No

Source: National Center for Health Statistics

FIGURE 8.
WILL STATES MEET OBJECTIVE FOR PRENATAL CARE AMONG WHITES?


Projections for 1990*
▦ D.C.
▦ No, Percent Increasing
▤ No, Percent Decreasing

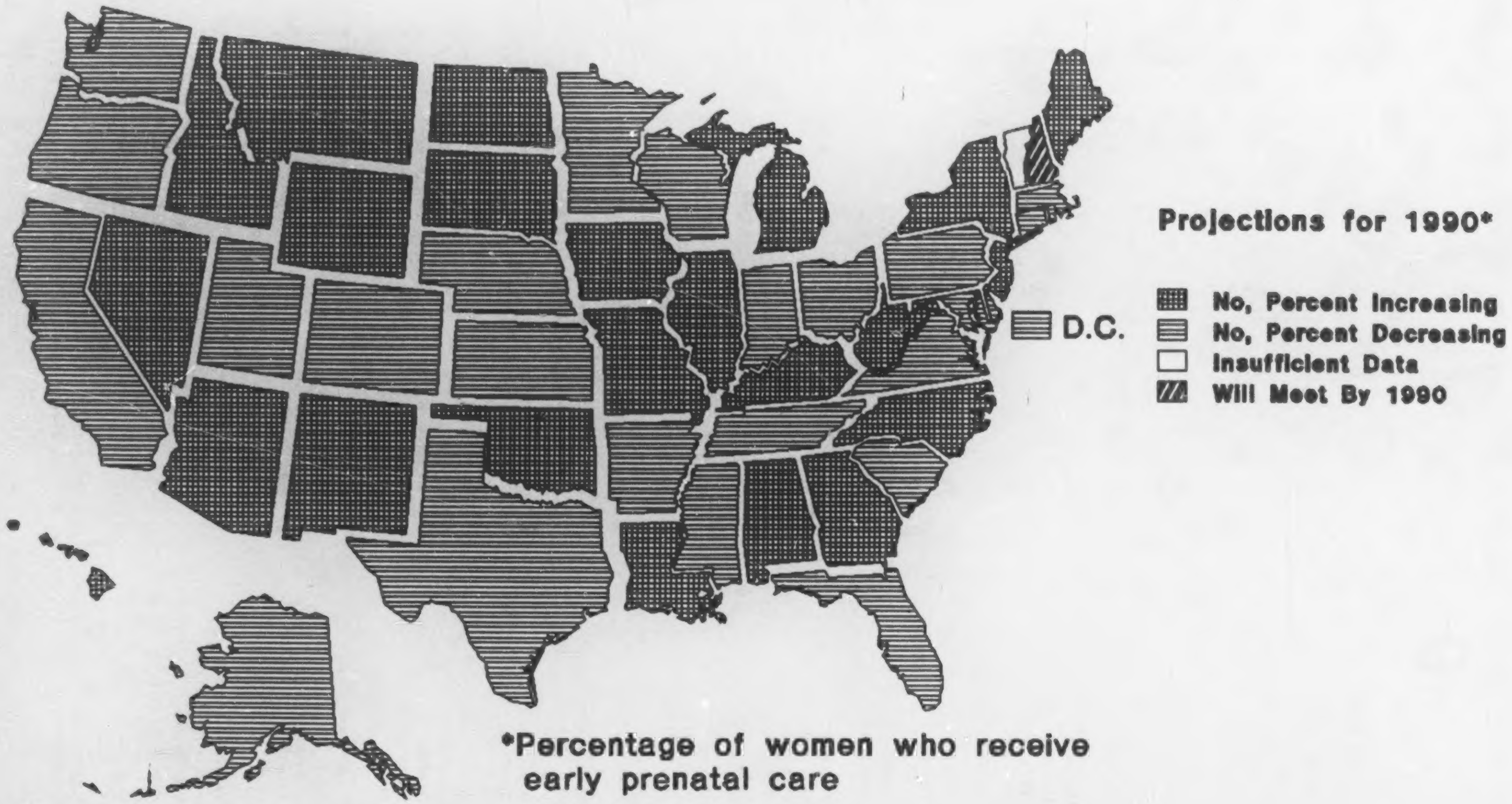
*Percentage of women who receive early prenatal care.

TABLE 17 - Percentage of Births to Women Who Began Prenatal Care in the First Trimester of Pregnancy, Blacks

	1980	1981	1982	1983	1984	1985	Average Annual Percentage Change	Is Objective Projected To Be Met?
United States	62.7	62.4	61.5	61.5	62.2	61.8	-.29%	No
Alabama	56.7	56.5	56.5	58.0	58.8	58.1	.48%	No
Alaska	75.5	69.9	74.1	73.7	69.8	67.7	-2.16%	No
Arizona	59.7	67.8	71.7	69.0	64.9	65.1	1.75%	No
Arkansas	54.7	55.0	51.6	49.6	53.2	52.0	-1.02%	No
California	74.3	74.7	73.4	72.6	71.9	69.0	-1.47%	No
Colorado	69.7	70.8	67.4	67.5	69.7	69.0	-.20%	No
Connecticut	71.1	69.0	66.6	64.8	66.3	65.8	-1.54%	No
Delaware	66.0	66.2	63.1	59.9	64.4	61.6	-1.38%	No
District of Columbia	65.5	62.7	57.9	54.9	56.7	55.4	-3.29%	No
Florida	52.4	52.3	50.9	50.8	50.1	49.1	-1.28%	No
Georgia	62.1	61.5	59.6	63.1	63.2	62.9	.24%	No
Hawaii	74.8	75.9	72.4	70.6	73.0	75.1	.07%	No
Idaho	65.8	76.7	71.0	67.8	71.8	68.4	.78%	No
Illinois	64.6	64.8	63.9	64.8	65.3	64.7	.04%	No
Indiana	62.7	62.3	58.2	55.3	58.5	57.3	-1.80%	No
Iowa	73.6	73.6	72.3	73.7	73.3	74.0	.10%	No
Kansas	71.5	69.1	68.8	69.9	70.1	70.8	-.20%	No
Kentucky	54.0	58.2	60.2	60.2	61.1	62.6	3.02%	No
Louisiana	66.2	66.0	64.4	66.5	64.8	67.6	.41%	No
Maine	70.9	71.0	75.5	77.3	74.3	72.0	.29%	No
Maryland	70.5	67.7	66.3	65.1	65.2	66.7	-1.09%	No
Massachusetts	81.1	81.0	79.2	74.8	75.5	70.4	-2.79%	No
Michigan	70.1	69.3	71.0	70.8	72.3	71.6	.43%	No
Minnesota	65.2	63.4	60.8	65.1	63.4	60.8	-1.40%	No
Mississippi	63.5	63.6	62.1	63.2	63.5	63.3	-.06%	No
Missouri	67.7	67.1	67.5	66.0	67.1	68.3	.18%	No
Montana	70.4	72.7	66.7	67.6	79.7	72.0	.45%	No
Nebraska	67.2	68.4	63.2	64.4	61.6	63.9	-1.00%	No
Nevada	55.3	61.0	56.7	57.9	62.4	56.1	.28%	No
New Hampshire	74.2	76.8	68.3	76.8	81.0	84.1	2.53%	Yes
New Jersey	62.2	63.1	64.7	65.1	67.9	68.2	1.86%	No
New Mexico	49.1	53.3	51.4	51.8	52.7	49.2	.05%	No
New York	49.9	49.6	48.4	48.7	50.6	52.0	.83%	No
North Carolina	62.0	62.3	63.8	64.0	64.8	64.7	.87%	No
North Dakota	67.0	75.4	65.9	79.5	74.2	79.7	3.54%	No
Ohio	68.3	67.0	67.2	65.4	66.8	67.8	-.16%	No
Oklahoma	51.5	51.6	49.2	48.4	51.4	55.7	1.57%	No
Oregon	66.2	67.2	64.2	68.4	65.2	60.0	-1.93%	No
Pennsylvania	59.7	61.0	60.0	59.7	59.0	55.5	-1.45%	No
Rhode Island	77.5	76.1	76.2	68.1	71.9	71.7	-1.53%	No
South Carolina	57.2	54.6	53.6	51.9	53.5	53.5	-1.32%	No
South Dakota	65.4	51.5	59.3	60.2	63.0	69.9	1.34%	No
Tennessee	63.7	62.4	61.0	62.1	62.7	63.5	-.06%	No
Texas	58.4	58.1	57.3	57.4	58.2	57.1	-.47%	No
Utah	75.0	70.0	69.1	69.7	67.7	61.5	-3.90%	No
Vermont	-	-	-	-	-	71.4		
Virginia	73.0	72.5	70.9	69.2	68.0	67.7	-1.50%	No
Washington	67.4	68.0	64.7	65.4	65.7	65.9	-.45%	No
West Virginia	54.6	52.0	54.5	54.3	53.9	55.9	.47%	No
Wisconsin	67.7	67.8	67.6	67.5	68.5	64.9	-.85%	No
Wyoming	66.1	68.6	74.8	71.7	79.8	73.0	2.01%	No

Source: National Center for Health Statistics
Symbol: dash (-) = Fewer than 30 such births occurred, no percentage calculated

FIGURE 9.
WILL STATES MEET OBJECTIVE FOR PRENATAL CARE AMONG BLACKS?


D.C.
Projections for 1990*
▦ No, Percent Increasing
▤ No, Percent Decreasing
☐ Insufficient Data
▨ Will Meet By 1990

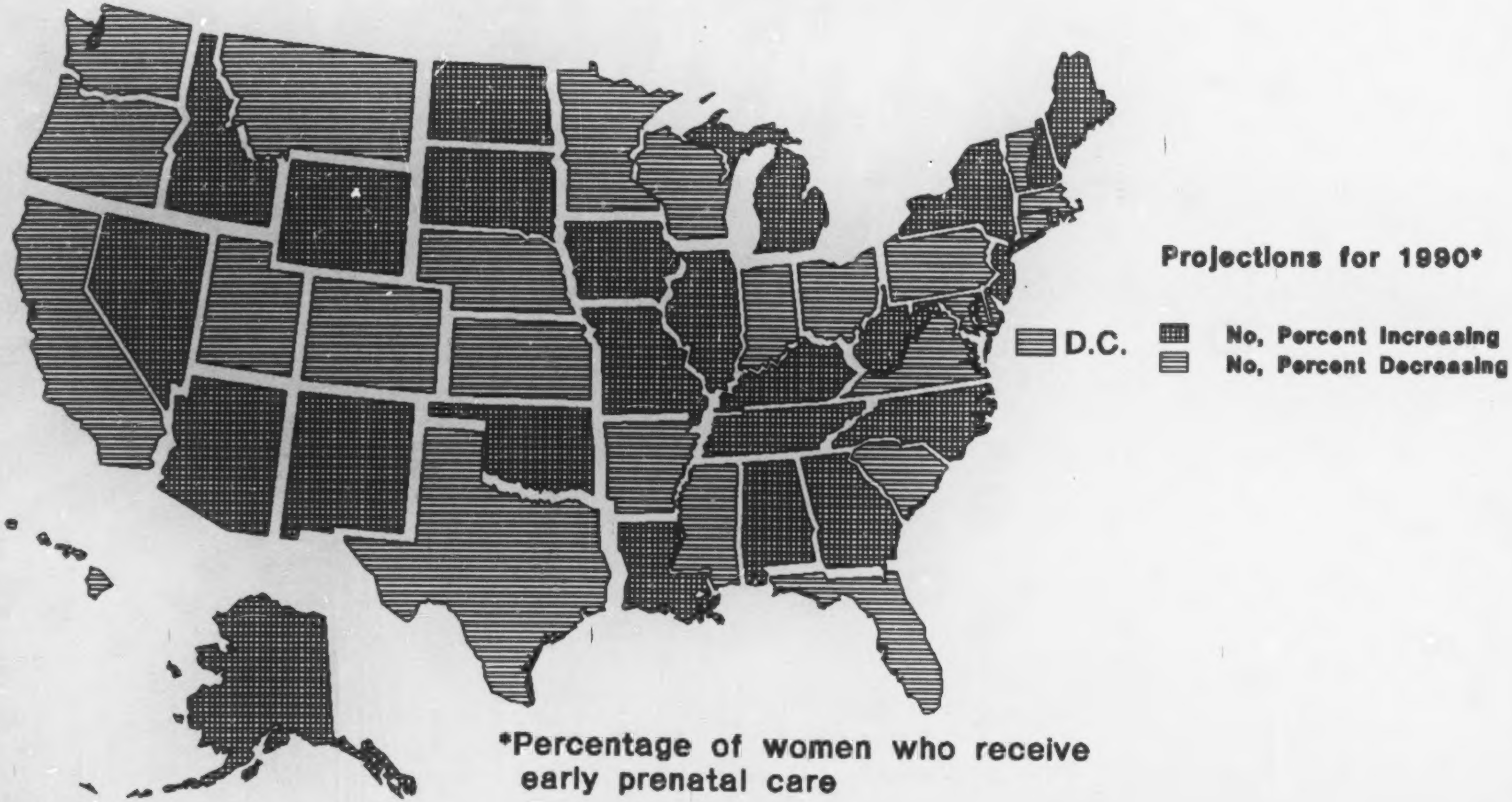
*Percentage of women who receive early prenatal care

TABLE 18 - Percentage of Women Who Began Prenatal Care in the First Trimester of Pregnancy, Nonwhites

	1980	1981	1982	1983	1983	1985	Average Annual Percentage Change	Is Objective Projected To Be Met?
United States	63.8	63.8	63.2	63.4	64.1	63.7	-.03%	No
Alabama	56.8	56.7	56.7	58.2	59.0	58.4	.54%	No
Alaska	67.1	65.3	67.8	65.9	67.4	67.8	.20%	No
Arizona	58.2	61.8	64.5	61.2	58.9	59.4	.41%	No
Arkansas	55.1	55.4	52.3	50.5	53.8	52.5	-.96%	No
California	75.3	76.0	75.5	75.0	74.6	73.0	-.63%	No
Colorado	69.2	68.5	65.7	67.7	68.9	68.7	-.14%	No
Connecticut	71.9	70.2	68.1	66.7	68.2	67.7	-1.20%	No
Delaware	66.0	67.0	63.6	60.6	65.4	62.7	-1.01%	No
District of Columbia	65.6	62.8	58.0	55.0	56.8	55.0	-3.46%	No
Florida	53.0	53.1	51.7	51.6	51.1	50.1	-1.11%	No
Georgia	62.4	61.8	58.7	63.4	63.6	63.2	.25%	No
Hawaii	75.8	75.9	73.7	73.8	74.9	74.4	-.37%	No
Idaho	64.7	65.0	66.9	66.0	67.3	65.4	.22%	No
Illinios	65.1	65.5	64.8	65.7	66.2	65.5	.14%	No
Indiana	63.6	63.4	59.9	57.1	60.2	58.8	-1.55%	No
Iowa	71.5	71.2	70.1	73.5	70.3	73.6	.57%	No
Kansas	71.2	68.4	67.1	68.5	68.9	69.6	-.47%	No
Kentucky	54.8	58.9	60.5	60.7	61.5	62.8	2.77%	No
Louisiana	66.3	66.0	64.5	66.5	65.1	68.0	.51%	No
Maine	69.0	72.7	75.3	80.9	76.9	76.4	2.07%	No
Maryland	71.2	68.6	67.4	66.5	66.7	67.8	-.97%	No
Massachusetts	81.8	81.4	79.7	76.1	76.6	73.1	-2.22%	No
Michigan	70.5	70.0	71.3	73.9	72.7	72.0	.41%	No
Minnesota	56.9	54.3	54.8	57.7	58.0	56.7	-.08%	No
Mississippi	63.5	63.6	62.2	63.3	63.5	63.4	-.02%	No
Missouri	68.2	67.5	68.0	66.6	67.7	68.9	.21%	No
Montana	62.8	61.8	62.0	60.6	59.5	60.4	-.79%	No
Nebraska	65.2	65.9	63.6	64.5	60.1	64.4	-.25%	No
Nevada	60.1	64.3	61.6	61.9	65.9	61.9	.59%	No
New Hampshire	79.7	78.4	75.4	78.8	79.5	86.0	1.53%	No
New Jersey	64.2	64.9	66.5	67.0	70.0	70.2	1.79%	No
New Mexico	45.4	47.2	48.5	48.4	50.8	47.8	1.02%	No
New York	52.4	52.3	50.9	51.4	53.1	54.4	.75%	No
North Carolina	62.6	63.1	64.5	64.6	65.3	65.3	.83%	No
North Dakota	58.1	64.3	60.7	68.1	66.7	67.2	2.95%	No
Ohio	69.0	68.0	67.9	66.4	67.8	68.6	-.11%	No
Oklahoma	52.8	51.6	51.7	50.9	53.3	57.0	1.54%	No
Oregon	66.2	63.1	64.7	68.3	67.8	66.0	-.07%	No
Pennsylvania	60.6	61.9	61.2	60.9	60.2	57.0	-1.22%	No
Rhode Island	76.1	74.9	73.7	64.9	68.8	69.1	-1.90%	No
South Carolina	57.5	54.9	53.8	52.2	53.7	53.9	-1.30%	No
South Dakota	44.4	46.3	44.9	46.3	50.4	52.6	3.44%	No
Tennessee	63.8	62.6	61.3	62.3	63.0	63.8	.00%	No
Texas	59.5	59.3	59.0	59.1	60.0	59.0	-.17%	No
Utah	63.4	64.7	64.5	66.3	64.1	62.2	-.38%	No
Vermont	72.7	69.5	76.0	75.4	64.5	71.4	-.35%	No
Virginia	73.4	72.9	71.3	70.0	69.0	68.5	-1.38%	No
Washington	68.4	67.7	66.1	66.1	68.0	67.2	-.37%	No
West Virginia	55.4	53.5	55.7	56.1	56.0	57.9	.90%	No
Wisconsin	67.1	66.8	66.6	65.9	66.2	63.2	-1.20%	No
Wyoming	62.7	70.5	68.5	67.1	73.2	66.7	1.25%	No

Source: National Center for Health Statistics

FIGURE 10.
WILL STATES MEET OBJECTIVE FOR PRENATAL CARE AMONG NONWHITES?


D.C.
Projections for 1990*
▦ No, Percent Increasing
▤ No, Percent Decreasing

*Percentage of women who receive early prenatal care

Low Birth Weight

OBJECTIVE: By 1990, low birth weight babies, 2,500 grams and under (approximately 5 1/2 pounds), should constitute no more than 5 percent of all live births.

National Progress

From 1980 through 1985, there was no change in the percentage of low birth weight births. In 1980 and 1985, 6.8 percent of all births were below 2,500 grams. Thus, it is projected that this objective will not be met by 1990.

State Progress

Seven states are projected to meet this goal by 1990. In 1985, four states (Alaska, Minnesota, New Hampshire, and North Dakota) had already met the objective. Twenty-one states moved in the other direction -- they had higher percentages of low birth weight infants in 1985 than in 1980.

Discussion

Developing strategies to prevent low weight births is difficult because understanding of the basic causes of preterm labor and intrauterine growth retardation is limited.[42] However, because low birth weight is a causal factor in perinatal, neonatal, and infant deaths, it follows that the strategies used to affect mortality rates, such as obtaining sufficient prenatal health care, will also help increase birth weights. The elimination of poor health habits before and during pregnancy, for example, the cessation of smoking, alcohol consumption, and drug abuse, and the identification of medical conditions such as poor obstetrical history and chronic diseases, would be helpful in raising birth weights.[43]

Further research on the etiology of low birth weight is needed to help identify those women at greatest risk of delivering low birth weight infants. Additionally, access to health care before pregnancy or in the first trimester would facilitate early identification of these women and allow early intervention. Early education on proper health habits, such as diet, and providing access to related support services, such as smoking cessation programs, would be helpful in making progress towards meeting this objective.

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[42] *Midcourse Review*, p. 46.

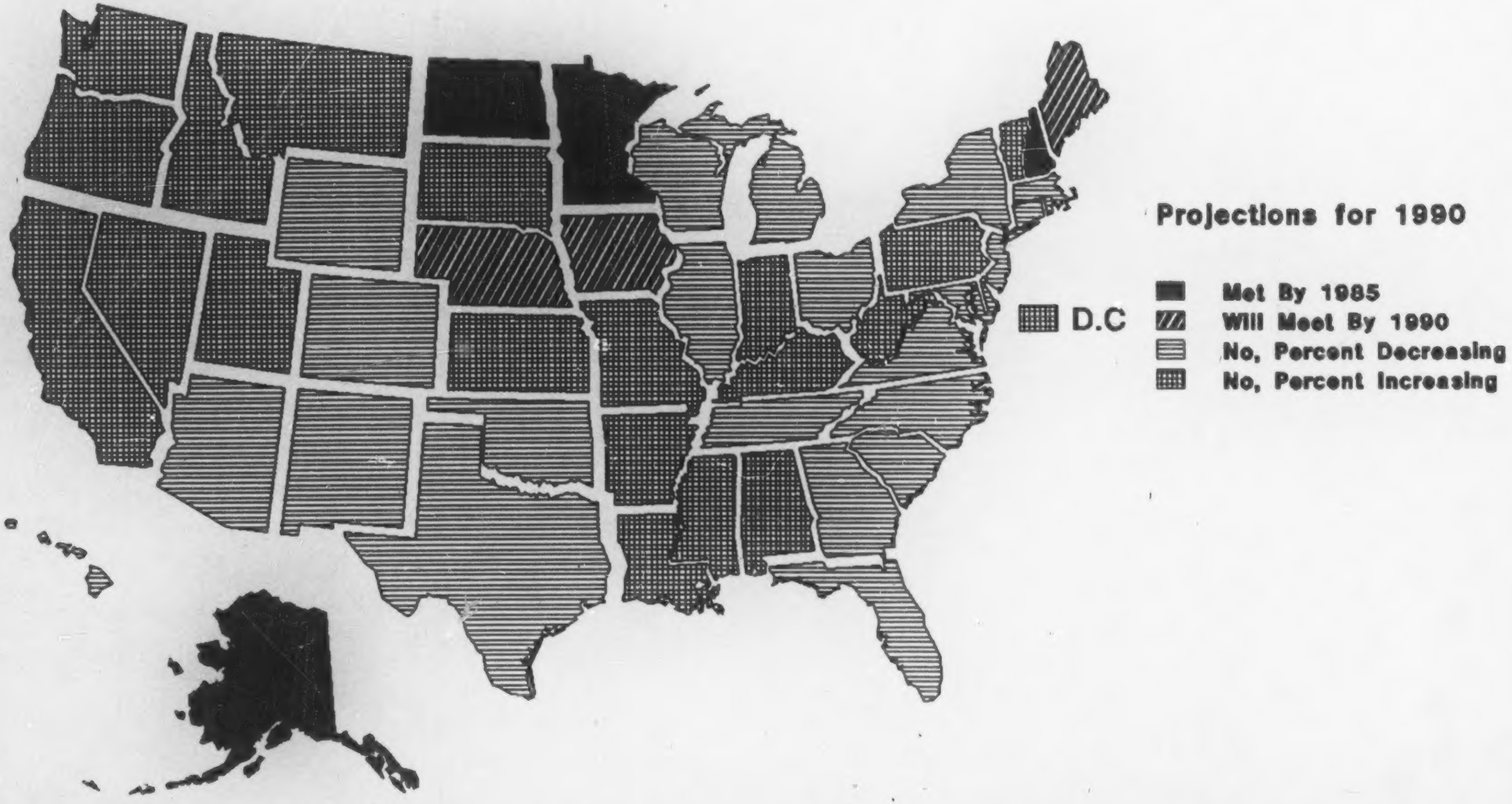
[43] Ibid., p. 47.

TABLE 19 - Percentage of Low Weight Births, All Races

	1980	1981	1982	1983	1984	1985	Average Annual Percentage Change	Is Objective Projected To Be Met?
United States	6.8	6.8	6.8	6.8	6.7	6.8	.00%	No
Alabama	7.9	7.9	7.9	7.9	7.9	8.0	.25%	No
Alaska	5.4	4.9	4.9	4.7	4.8	4.9	-1.92%	Met
Arizona	6.2	6.1	5.9	6.1	6.1	6.2	.00%	No
Arkansas	7.6	7.4	7.4	7.8	7.5	8.0	1.03%	No
California	5.9	5.9	5.9	6.0	5.9	6.0	.34%	No
Colorado	8.2	8.0	7.7	7.9	7.6	7.7	-1.25%	No
Connecticut	6.7	6.8	6.8	6.4	6.6	6.6	-.30%	No
Delaware	7.7	7.8	7.3	7.2	7.4	7.3	-1.06%	No
District of Columbia	12.8	13.3	13.4	13.1	12.5	13.3	.77%	No
Florida	7.6	7.4	7.5	7.4	7.4	7.5	-.26%	No
Georgia	8.6	8.5	8.5	8.4	8.3	8.1	-1.19%	No
Hawaii	7.1	6.8	7.3	7.0	7.2	6.5	-1.75%	No
Idaho	5.3	5.1	5.3	5.6	5.1	5.5	.74%	No
Illinois	7.2	7.4	7.2	7.2	7.1	7.2	.00%	No
Indiana	6.3	6.3	6.4	6.3	6.3	6.4	.32%	No
Iowa	5.0	5.0	4.8	5.0	4.9	5.1	.40%	Yes
Kansas	5.8	6.3	6.2	6.1	6.1	6.1	1.01%	No
Kentucky	6.8	7.0	6.9	6.9	6.9	7.0	.58%	No
Louisiana	8.6	8.5	8.4	8.6	8.5	8.7	.23%	No
Maine	6.5	5.3	5.1	5.6	5.5	5.1	-4.74%	Yes
Maryland	8.2	7.7	7.4	7.7	7.4	7.6	-1.51%	No
Massachusetts	6.1	6.0	5.9	5.9	5.9	5.8	-1.00%	No
Michigan	6.9	6.9	6.9	7.0	7.0	6.8	-.29%	No
Minnesota	5.1	5.3	4.9	5.1	4.9	4.8	-1.21%	Met
Mississippi	8.7	8.6	8.8	8.8	8.7	8.8	.23%	No
Missouri	6.6	6.7	6.6	6.7	6.7	6.7	.30%	No
Montana	5.6	5.5	5.6	5.6	5.8	5.7	.35%	No
Nebraska	5.6	5.5	5.5	5.4	5.4	5.3	-1.10%	Yes
Nevada	6.6	7.0	6.4	7.0	6.7	6.9	.89%	No
New Hampshire	5.4	5.0	5.2	5.1	5.8	5.0	-1.53%	Met
New Jersey	7.2	7.1	6.9	7.2	7.0	6.8	-1.14%	No
New Mexico	7.6	7.4	7.8	7.6	7.6	7.1	-1.35%	No
New York	7.4	7.4	7.2	7.2	7.0	7.0	-1.11%	No
North Carolina	7.9	7.9	8.0	7.8	7.8	7.9	.00%	No
North Dakota	4.9	4.5	4.8	4.7	4.8	4.9	.00%	Met
Ohio	6.8	6.7	6.6	6.7	6.4	6.6	-.60%	No
Oklahoma	6.8	6.6	6.8	6.7	6.3	6.4	-1.21%	No
Oregon	4.9	4.8	4.9	5.0	5.2	5.1	.80%	No
Pennsylvania	6.5	6.5	6.5	6.7	6.6	6.6	.31%	No
Rhode Island	6.3	5.9	6.1	6.4	6.0	6.3	.00%	No
South Carolina	8.6	8.9	8.9	8.6	8.8	8.6	.00%	No
South Dakota	5.1	5.3	5.1	5.1	5.1	5.5	1.52%	No
Tennessee	8.0	8.0	7.9	8.0	7.9	7.9	-.25%	No
Texas	6.9	6.9	6.9	6.9	6.8	6.8	-.29%	No
Utah	5.2	5.3	5.6	5.6	5.6	5.7	1.85%	No
Vermont	5.9	6.2	5.9	5.9	6.1	6.0	.34%	No
Virginia	7.5	7.3	7.2	7.2	7.2	7.0	-1.37%	No
Washington	5.1	5.2	5.1	5.2	5.1	5.3	.77%	No
West Virginia	6.7	7.1	6.7	6.7	6.9	6.9	.59%	No
Wisconsin	5.4	5.3	5.0	5.4	5.1	5.3	-.37%	No
Wyoming	7.3	6.6	7.2	7.1	7.1	7.1	-.55%	No

Source: National Center for Health Statistics

FIGURE 11.
WILL STATES MEET OBJECTIVE FOR LOW BIRTH WEIGHT AMONG ALL RACES?


D.C
Projections for 1990
Met By 1985
Will Meet By 1990
No, Percent Decreasing
No, Percent Increasing

OBJECTIVE: By 1990, no racial or ethnic group of the population should have a percent of low birth weight infants that exceeds 9 percent of all live births.

National Progress

For whites, this objective has been met, but for blacks and nonwhites, it has not. It is unlikely the objective will be met by 1990. Among blacks, the percentage of low birth weight infants (12.4 for 1985) is twice that for whites (5.6 for 1985) and has been for the past 20 years. From 1980 to 1985, the percent of low birth weight babies born to nonwhite and black mothers remained virtually unchanged.

State Progress

By 1990, two states are projected to meet the objective for blacks and 19 states are projected to meet the objective for all nonwhites. As of 1980, every state had already met the objective for whites. In 1985, no state had met this objective for blacks and 16 states had met the objective for all nonwhites. The percentage of low birth weight infants among live births increased from 1980 to 1985 in 17 states for blacks and in 17 states for all nonwhites.

Discussion

According to the *Midcourse Review*, in 1984, all ethnic and racial groups except blacks had met this goal, with a low birth weight rate below nine percent. The approximately 2:1 low birth weight ratio between blacks and other ethnic groups has remained fairly constant for the past 20 years.[44]

Clearly, such factors as improving access to health care for black women, decreasing the number of pregnancies to black women in high-risk categories, and improving education for pregnant black women would help reduce the number of low birth weight infants. Programs specifically targeted to black women may be helpful.

However, when the variables known to contribute to low birth weight are held constant, black women are still at higher risk for delivering low birth weight infants.[45] Clearly, more research is needed on this relationship. Further, other nonwhite groups, such as American Indians, still have a higher rate than whites. Improvement in their prenatal care should also be addressed.

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[44] Ibid., p. 47.

[45] Ibid., p. 47.

TABLE 20 - Percentage of Low Weight Births, Whites

	1980	1981	1982	1983	1984	1985	Average Annual Percentage Change	Is Objective Projected To Be Met?
United States	5.7	5.7	5.6	5.7	5.6	5.6	-.35%	Met
Alabama	5.6	5.8	5.7	6.0	5.7	6.6	3.34%	Met
Alaska	5.0	4.5	4.2	4.5	4.3	4.4	-2.52%	Met
Arizona	5.9	5.8	5.8	5.8	5.9	5.9	.00%	Met
Arkansas	5.9	5.8	5.8	6.1	6.0	6.6	2.27%	Met
California	5.2	5.2	5.2	5.3	5.1	5.3	.38%	Met
Colorado	7.9	7.8	7.4	7.6	7.3	7.4	-1.30%	Met
Connecticut	6.1	5.8	5.8	5.6	5.6	5.7	-1.35%	Met
Delaware	5.4	5.5	5.7	5.3	6.1	5.7	1.09%	Met
District of Columbia	6.3	5.8	5.8	6.7	5.1	5.2	-3.77%	Met
Florida	6.0	5.9	5.9	5.9	6.0	6.0	.00%	Met
Georgia	6.4	6.0	6.1	6.1	5.9	6.1	-.96%	Met
Hawaii	6.0	5.7	6.4	5.8	6.1	5.3	-2.45%	Met
Idaho	5.3	5.0	5.3	5.5	5.0	5.5	.74%	Met
Illinois	5.4	5.5	5.5	5.3	5.3	5.4	.00%	Met
Indiana	5.6	5.6	5.7	5.6	5.7	5.8	.70%	Met
Iowa	4.8	4.8	4.6	4.9	4.7	5.0	.82%	Met
Kansas	5.3	5.7	5.6	5.5	5.5	5.5	.74%	Met
Kentucky	6.3	6.6	6.5	6.4	6.4	6.5	.63%	Met
Louisiana	6.0	5.9	5.8	5.8	5.7	5.9	-.34%	Met
Maine	5.2	5.3	5.1	5.6	5.4	5.1	-.39%	Met
Maryland	6.1	5.8	5.4	5.5	5.4	5.4	-2.41%	Met
Massachusetts	5.7	5.6	5.5	5.4	5.5	5.5	-.71%	Met
Michigan	5.7	5.7	5.6	5.6	5.5	5.4	-1.08%	Met
Minnesota	4.9	5.0	4.7	4.9	4.7	4.5	-1.69%	Met
Mississippi	5.8	5.6	6.0	5.9	6.0	6.1	1.01%	Met
Missouri	5.6	5.7	5.5	5.5	5.6	5.6	.00%	Met
Montana	5.5	5.5	5.6	5.5	5.7	5.6	.36%	Met
Nebraska	5.2	5.0	5.0	5.0	5.0	4.9	-1.18%	Met
Nevada	6.0	6.4	5.8	6.5	6.1	6.1	.33%	Met
New Hampshire	5.3	5.0	5.2	5.0	5.0	5.0	-1.16%	Met
New Jersey	5.8	5.6	5.4	5.7	5.7	5.5	-1.06%	Met
New Mexico	7.6	7.4	7.9	7.6	7.8	7.2	-1.08%	Met
New York	6.1	6.1	5.9	5.9	5.7	5.6	-1.70%	Met
North Carolina	6.1	6.0	6.0	5.9	6.1	6.0	-.33%	Met
North Dakota	4.8	4.4	4.7	4.6	4.5	4.8	.00%	Met
Ohio	5.7	5.7	5.7	5.7	5.5	5.7	.00%	Met
Oklahoma	6.2	6.2	6.3	6.1	5.8	5.9	-.99%	Met
Oregon	4.7	4.6	4.7	4.8	5.0	4.9	.84%	Met
Pennsylvania	5.6	5.5	5.5	5.6	5.5	5.5	-.36%	Met
Rhode Island	5.9	5.4	5.5	6.0	5.6	5.9	.00%	Met
South Carolina	5.9	6.2	6.2	6.1	6.2	5.9	.00%	Met
South Dakota	4.8	4.9	4.8	4.8	4.8	5.2	1.61%	Met
Tennessee	6.4	6.4	6.4	6.5	6.4	6.4	.00%	Met
Texas	6.0	6.0	6.0	6.0	6.0	5.9	-.34%	Met
Utah	5.1	5.3	5.5	5.5	5.4	5.6	1.89%	Met
Vermont	6.0	6.2	5.9	5.9	6.2	6.0	.00%	Met
Virginia	5.8	5.8	5.6	5.7	5.7	5.5	-1.06%	Met
Washington	4.8	4.9	4.7	5.0	4.7	4.9	.41%	Met
West Virginia	6.4	6.9	6.6	6.5	6.6	6.7	.92%	Met
Wisconsin	4.8	4.7	4.5	4.8	4.6	4.6	-.85%	Met
Wyoming	7.2	6.5	7.1	7.0	7.1	7.1	-.28%	Met

Source: National Center for Health Statistics

TABLE 21 - Percentage of Low Weight Births, Blacks

	1980	1981	1982	1983	1984	1985	Average Annual Percent of Change	Is Objective Projected To Be Met?
United States	12.5	12.5	12.4	12.6	12.4	12.4	-.16%	No
Alabama	12.0	11.8	11.9	11.6	12.1	12.0	.00%	No
Alaska	-	7.5	8.6	-	7.1	10.6		
Arizona	11.1	11.4	9.1	12.7	11.9	12.4	2.24%	No
Arkansas	12.7	12.3	12.3	13.1	12.3	12.5	-.32%	No
California	11.4	11.2	11.0	11.4	11.4	11.9	.86%	No
Colorado	14.4	12.3	12.4	13.3	13.0	13.1	-1.87%	No
Connecticut	11.5	14.3	13.4	12.6	12.9	13.5	3.26%	No
Delaware	15.6	14.9	12.6	12.7	11.8	12.9	-3.73%	Yes
District of Columbia	14.0	14.9	15.1	14.6	14.2	15.3	1.79%	No
Florida	12.2	11.9	11.9	12.0	11.9	12.4	.33%	No
Georgia	12.4	12.8	12.7	12.7	12.6	11.7	-1.16%	No
Hawaii	10.1	9.1	9.4	10.9	9.0	9.5	-1.22%	No
Idaho	-	-	-	-	-	-		
Illinois	13.6	14.2	13.6	13.9	13.8	13.5	-.15%	No
Indiana	12.1	11.9	12.0	12.2	11.7	11.7	-.67%	No
Iowa	12.2	10.0	10.9	11.9	10.6	10.2	-3.52%	No
Kansas	11.6	12.2	12.2	12.0	12.1	12.1	.85%	No
Kentucky	11.9	11.5	11.3	12.3	12.0	12.2	.50%	No
Louisiana	12.8	12.8	12.8	13.4	13.1	13.1	.46%	No
Maine	-	-	-	-	-	-		
Maryland	13.0	12.1	12.1	12.7	12.0	12.5	-.78%	No
Massachusetts	10.9	10.9	11.0	11.4	11.0	10.3	-1.13%	No
Michigan	12.9	13.2	13.8	14.2	14.2	13.6	1.06%	No
Minnesota	12.1	11.8	10.4	12.3	10.6	9.8	-4.13%	Yes
Mississippi	11.8	11.8	12.0	12.0	11.7	12.2	.67%	No
Missouri	12.9	12.5	12.6	13.1	12.6	12.9	.00%	No
Montana	-	-	-	-	-	-		
Nebraska	12.6	12.7	12.9	11.3	11.6	12.0	-.97%	No
Nevada	11.6	12.5	11.6	10.3	10.2	12.3	1.18%	No
New Hampshire	-	-	-	-	-	-		
New Jersey	12.7	13.3	12.9	12.8	12.4	12.2	-.80%	No
New Mexico	7.8	11.3	11.7	12.5	9.8	10.5	6.13%	No
New York	12.4	12.3	12.1	12.0	11.7	11.9	-.82%	No
North Carolina	12.2	12.1	12.4	12.4	12.2	12.7	.81%	No
North Dakota	-	-	-	-	-	-		
Ohio	12.9	13.0	12.6	13.1	12.2	11.9	-1.60%	No
Oklahoma	12.3	11.3	12.6	11.9	11.5	12.0	-.49%	No
Oregon	10.4	10.2	10.6	9.7	10.9	11.6	2.21%	No
Pennsylvania	13.0	13.4	13.2	13.8	13.9	13.4	.61%	No
Rhode Island	11.5	11.2	12.4	11.0	11.6	10.7	-1.43%	No
South Carolina	12.6	12.8	13.0	12.6	12.7	13.0	.63%	No
South Dakota	-	-	-	-	-	-		
Tennessee	13.6	13.7	13.2	13.3	13.2	12.9	-1.05%	No
Texas	12.4	12.8	12.2	12.6	12.2	12.2	-.32%	No
Utah	-	-	11.2	10.3	-	10.4		
Vermont	-	-	-	-	-	-		
Virginia	12.3	12.0	12.2	12.1	12.0	11.5	-1.34%	No
Washington	10.2	10.3	10.1	9.3	10.5	10.5	.58%	No
West Virginia	12.3	11.7	10.0	11.1	13.4	11.7	-1.00%	No
Wisconsin	12.7	12.6	12.1	12.8	12.1	12.6	-.16%	No
Wyoming	-	-	-	-	-	-		

Source: National Center for Health Statistics
Symbol: dash (-) = Fewer than 30 such births occurred, no percentage calculated

FIGURE 12.
WILL STATES MEET OBJECTIVE FOR LOW BIRTH WEIGHT AMONG BLACKS?

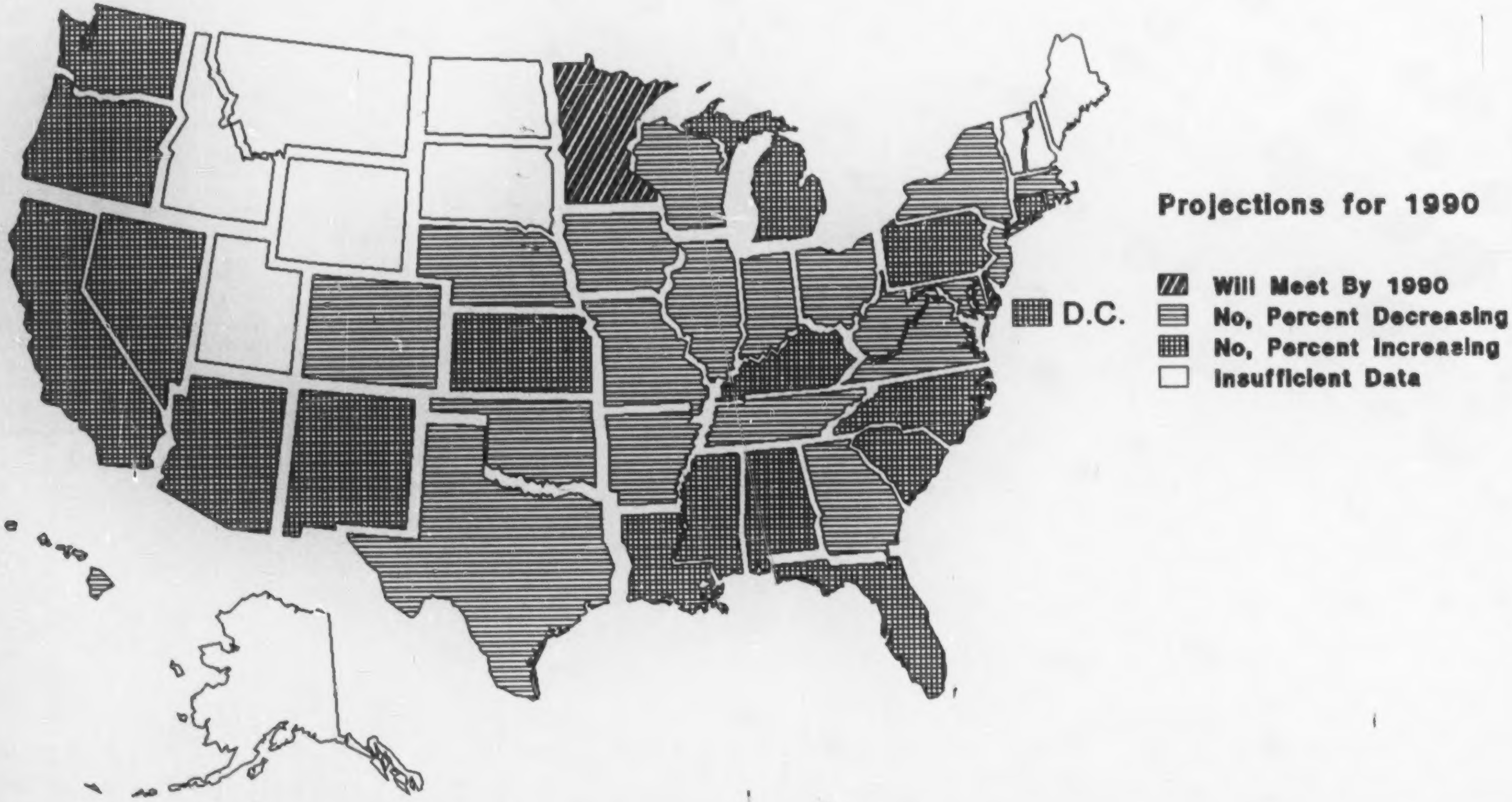
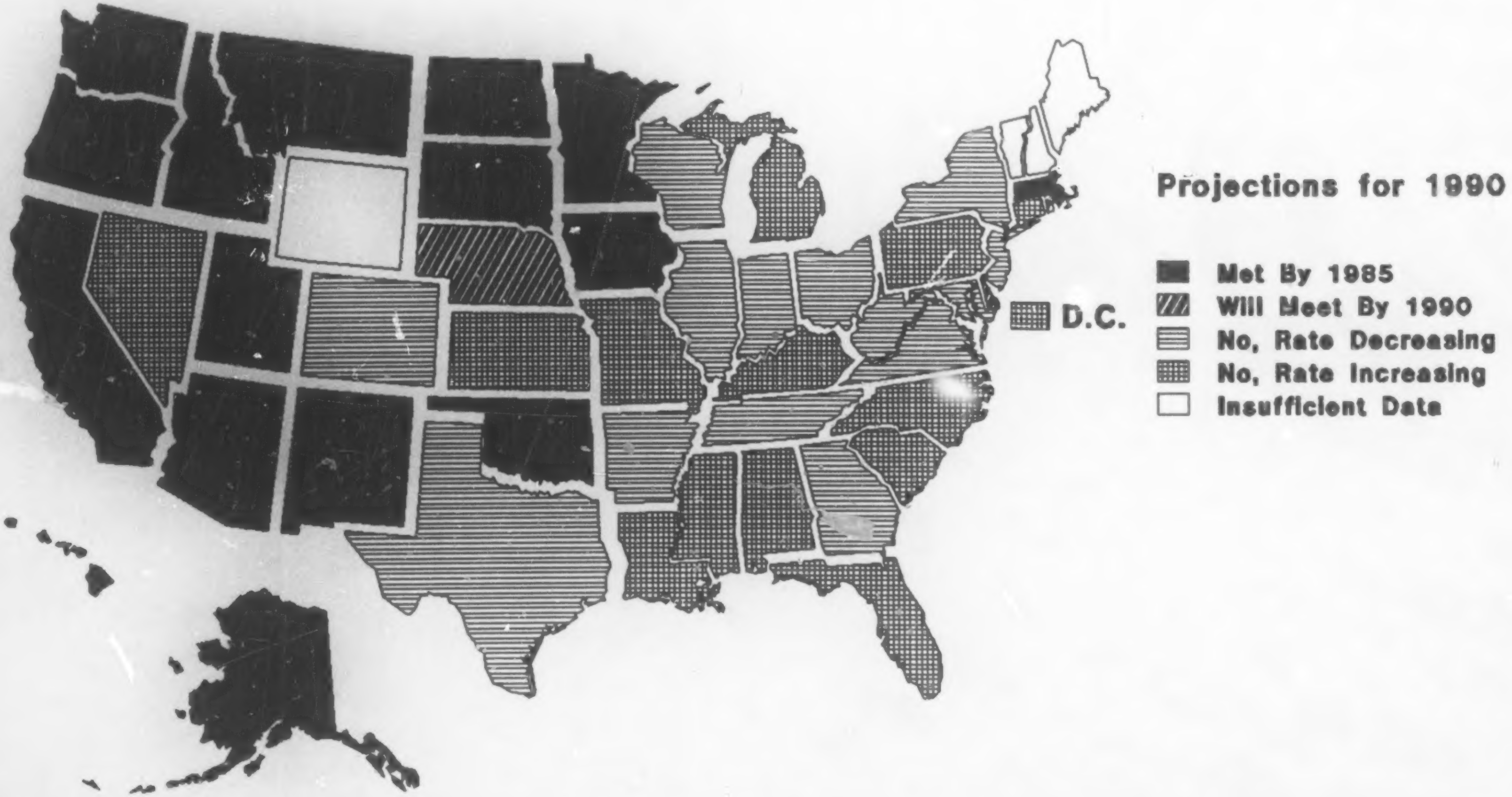

D.C.
Projections for 1990
Will Meet By 1990
No, Percent Decreasing
No, Percent Increasing
Insufficient Data

TABLE 22 - Percentage of Low Weight Births, Nonwhites

	1980	1981	1982	1983	1984	1985	Average Annual Percentage Change	Is Objective Projected To Be Met?
United States	11.4	11.4	11.2	11.4	11.1	11.1	-.53%	No
Alabama	11.9	11.8	11.8	11.6	12.0	12.0	.17%	No
Alaska	6.3	5.9	6.5	5.0	6.1	5.9	-1.30%	Met
Arizona	7.4	7.8	6.6	7.3	7.4	7.7	.80%	Met
Arkansas	12.5	12.1	12.0	12.8	12.0	12.4	-.16%	No
California	9.1	8.9	8.6	8.7	8.7	8.7	-.89%	Met
Colorado	12.4	10.6	11.2	11.6	11.0	11.4	-1.67%	No
Connecticut	11.0	13.2	12.6	11.8	12.2	12.6	2.75%	No
Delaware	15.1	14.6	12.6	12.5	11.4	12.5	-3.71%	Yes
District of Columbia	13.9	14.8	15.1	14.5	14.2	15.0	1.53%	No
Florida	11.9	11.7	11.7	11.8	11.6	12.1	.33%	No
Georgia	12.3	12.7	12.5	12.6	12.5	11.6	-1.17%	No
Hawaii	7.4	7.2	7.6	7.5	7.6	6.9	-1.39%	Met
Idaho	7.1	7.4	6.2	6.8	7.9	7.1	.00%	Met
Illinois	13.0	13.5	12.9	13.3	13.1	12.9	-.15%	No
Indiana	11.7	11.4	11.6	11.8	11.2	11.4	-.52%	No
Iowa	10.5	8.5	9.0	9.4	8.8	8.5	-4.14%	Met
Kansas	10.2	10.7	11.0	10.9	10.9	10.9	1.34%	No
Kentucky	11.5	11.3	10.8	11.6	11.7	11.8	.52%	No
Louisiana	12.6	12.6	12.5	13.1	12.8	12.8	.32%	No
Maine	-	-	-	-	-	-		
Maryland	12.6	11.7	11.6	12.1	11.6	12.0	-.97%	No
Massachusetts	10.0	10.0	9.9	10.1	9.8	9.0	-2.09%	Met
Michigan	12.3	12.6	13.0	13.6	13.5	12.8	.80%	No
Minnesota	8.6	9.1	8.2	8.4	7.8	7.6	-2.44%	Met
Mississippi	11.7	11.7	12.0	11.9	11.6	12.1	.67%	No
Missouri	12.3	12.2	12.2	12.7	12.3	12.4	.16%	No
Montana	6.7	6.0	5.8	6.4	6.9	6.0	-2.18%	Met
Nebraska	11.1	11.2	11.2	10.0	9.7	10.0	-2.07%	Yes
Nevada	9.8	9.6	9.5	9.1	9.6	10.7	1.77%	No
New Hampshire	-	-	-	-	-	-		
New Jersey	12.1	12.5	12.2	12.2	11.6	11.4	-1.18%	No
New Mexico	7.3	7.1	7.4	7.4	6.6	6.0	-3.85%	Met
New York	11.5	11.5	11.3	11.3	10.9	11.1	-.71%	No
North Carolina	11.8	11.8	12.1	12.1	11.7	12.2	.67%	No
North Dakota	6.7	5.4	5.7	5.9	7.3	5.9	-2.51%	Met
Ohio	12.6	12.6	12.1	12.7	11.8	11.4	-1.98%	No
Oklahoma	8.8	8.4	8.9	8.9	8.3	8.5	-.69%	Met
Oregon	8.2	8.1	7.8	7.4	7.4	7.5	-1.77%	Met
Pennsylvania	12.5	12.9	12.6	13.2	13.3	12.8	.48%	No
Rhode Island	10.8	10.3	11.0	10.3	10.1	9.7	-2.13%	Yes
South Carolina	12.4	12.7	12.8	12.4	12.6	12.8	.64%	No
South Dakota	7.1	8.0	6.9	7.0	6.3	7.0	-.28%	Met
Tennessee	13.4	13.4	13.0	13.0	13.0	12.7	-1.07%	No
Texas	11.8	12.1	11.5	11.9	11.5	11.4	-.69%	No
Utah	6.0	6.3	7.5	7.0	8.7	6.7	2.23%	Met
Vermont	-	-	-	-	-	-		
Virginia	12.0	11.5	11.7	11.5	11.4	10.9	-1.90%	No
Washington	7.3	8.0	7.6	7.2	8.0	7.4	.27%	Met
West Virginia	11.9	11.1	10.0	10.8	12.8	11.0	-1.56%	No
Wisconsin	11.1	10.9	10.3	11.2	10.3	10.8	-.55%	No
Wyoming	8.3	7.5	8.3	8.5	-	-		

Source: National Center for Health Statistics
Symbol: dash (-) = Fewer than 30 such births occurred, no percentage calculated

FIGURE 13.
WILL STATES MEET OBJECTIVE FOR LOW BIRTH WEIGHT AMONG NONWHITES?


D.C.
Projections for 1990
■ Met By 1985
▨ Will Meet By 1990
▤ No, Rate Decreasing
▦ No, Rate Increasing
□ Insufficient Data

Maternal Mortality

> **OBJECTIVE: By 1990, the maternal mortality rate should not exceed 5 deaths per 100,000 live births for any racial or ethnic group. The maternal mortality rate is the number of deaths to pregnant women due to complications of pregnancy, childbirth, and the puerperium per 100,000 live births.**

National Progress

According to the *Midcourse Review*, this objective is unlikely to be met even though the maternal mortality rate for all races decreased from 9.6 in 1978 to 8.0 in 1983. The number of deaths, however, increased for blacks and all nonwhites from 1983 through 1985. Despite the decline in the black maternal mortality rate from 1978 to 1983, the rate was still three times greater in 1983 than the maternal mortality rate for whites.[46]

State Progress

Due to the small number of maternal deaths per state, a meaningful maternal mortality rate by state cannot be calculated. Two million births are needed to estimate a maternal mortality rate with a 95 percent confidence interval of plus or minus 15 percent around the observed rate.[47] The table following shows the number of maternal deaths by state from 1980 through 1985.

Discussion

It is important to note the definition of maternal mortality indicated above. These figures include only the number of deaths to pregnant women due to complications of pregnancy, childbirth, and the puerperium. Underestimation of maternal mortality is a problem that has been recognized in the past. Deaths from ectopic pregnancy, induced abortion, and first-trimester spontaneous abortion, as well as maternal deaths that occur during pregnancy, are sometimes misclassified on death certificates. A study in Washington that reviewed state vital statistics from 1977-1984 found that the actual maternal mortality rate was 10.9 per 100,000 live births for the period, not 6.5, the recorded figure. Studies in Georgia, New Jersey, and Puerto Rico also showed that actual maternal mortality rates are higher than reported rates. Thus, the maternal mortality rates for the states and nation are most likely higher than reported.[48]

However, it is also clear that many of the antecedents to infant mortality -- lack of access to prenatal care, adolescent pregnancies, and lack of prenatal care for high-risk women -- also contribute to maternal mortality. To further reduce the rate, women and men should be educated on planning pregnancies and encouraged to do so. This will allow improvement in health habits prior to pregnancy and early identification of potential risk factors, such as pre-existing health conditions. Improved access to prenatal care, particularly for high-risk women, is also needed. Black women represent a group at particularly high risk, and special efforts should be made to reach them.

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[46] Ibid., p. 41.

[47] Ibid., p. 42.

[48] Centers for Disease Control, Morbidity and Mortality Weekly Report, (Vol. 35, No. 39), (hereinafter referred to as *MMWR)*. Washington, D.C.: U.S. Government Printing Office, 1986.

Age is another important factor in maternal health problems. Attention should be given to educating both pregnant teens and women over 35 about the risks of pregnancy, and to ensuring their access to prenatal care.

TABLE 23 - Number of Maternal Deaths, All Races

	1980	1981	1982	1983	1984	1985
United States	334	309	292	290	285	295
Alabama	7	7	13	7	9	9
Alaska	1	1	1	0	0	1
Arizona	3	2	3	4	5	1
Arkansas	4	3	1	4	2	7
California	42	38	42	35	32	37
Colorado	6	4	6	2	1	4
Connecticut	0	1	2	1	2	3
Delaware	0	0	1	0	0	1
District of Columbia	1	2	3	0	0	3
Florida	15	15	13	22	17	18
Georgia	10	9	11	14	11	15
Hawaii	1	1	1	0	1	1
Idaho	2	0	0	2	1	2
Illinois	16	24	20	14	18	13
Indiana	4	6	3	3	7	4
Iowa	5	0	2	4	5	1
Kansas	4	6	3	4	4	3
Kentucky	9	6	3	3	4	1
Louisiana	8	13	7	6	6	9
Maine	1	0	0	0	0	0
Maryland	4	5	2	4	3	2
Massachusetts	2	1	2	2	1	4
Michigan	16	7	11	6	4	9
Minnesota	4	3	3	3	5	3
Mississippi	2	7	1	1	4	4
Missouri	6	5	3	6	2	3
Montana	1	0	1	4	1	0
Nebraska	1	2	1	0	5	1
Nevada	0	2	0	2	3	1
New Hampshire	0	0	2	0	0	2
New Jersey	6	7	7	4	11	5
New Mexico	3	1	2	3	5	3
New York	45	29	28	41	33	29
North Carolina	5	7	11	7	12	4
North Dakota	0	0	0	0	1	1
Ohio	11	17	13	8	8	12
Oklahoma	10	8	1	3	3	4
Oregon	1	0	4	5	3	5
Pennsylvania	12	7	8	10	12	11
Rhode Island	3	0	1	1	1	0
South Carolina	12	3	6	4	5	4
South Dakota	1	1	1	0	0	2
Tennessee	9	11	5	9	6	4
Texas	22	32	29	23	18	29
Utah	3	0	5	3	1	4
Vermont	1	0	0	0	0	0
Virginia	4	6	3	4	6	5
Washington	1	4	4	5	4	3
West Virginia	4	2	1	3	0	2
Wisconsin	5	3	1	4	3	4
Wyoming	1	1	1	0	0	2

Source: National Center for Health Statistics

TABLE 24 - Number of Maternal Deaths, Whites

	1980	1981	1982	1983	1984	1985
United States	193	184	171	170	159	156
Alabama	4	3	4	2	4	3
Alaska	0	1	1	0	0	1
Arizona	3	1	3	2	5	1
Arkansas	3	2	1	2	0	2
California	24	32	29	23	18	26
Colorado	4	3	6	1	0	2
Connecticut	0	1	1	1	1	2
Delaware	0	0	1	0	0	1
District of Columbia	0	0	0	0	0	2
Florida	8	9	7	9	6	5
Georgia	3	1	4	5	3	3
Hawaii	0	1	0	0	0	0
Idaho	2	0	0	2	1	2
Illinois	11	9	13	9	6	6
Indiana	4	4	3	3	4	3
Iowa	5	0	2	2	5	1
Kansas	2	4	1	3	3	2
Kentucky	7	5	2	3	4	0
Louisiana	1	5	2	2	3	2
Maine	1	0	0	0	0	0
Maryland	0	3	0	1	0	1
Massachusetts	2	0	2	1	0	3
Michigan	7	6	3	4	1	7
Minnesota	4	3	3	3	4	3
Mississippi	1	5	1	0	2	2
Missouri	3	5	3	4	2	3
Montana	1	0	1	4	1	0
Nebraska	1	2	1	0	5	1
Nevada	0	1	0	2	2	1
New Hampshire	0	0	2	0	0	2
New Jersey	3	3	4	1	7	2
New Mexico	3	1	1	3	4	1
New York	25	14	15	21	16	13
North Carolina	2	0	4	2	6	4
North Dakota	0	0	0	0	1	1
Ohio	6	9	9	4	4	5
Oklahoma	6	6	1	1	2	2
Oregon	0	0	0	3	2	5
Pennsylvania	6	5	5	6	7	7
Rhode Island	2	0	1	1	1	0
South Carolina	7	0	0	1	3	0
South Dakota	0	1	1	0	0	0
Tennessee	7	10	2	7	2	3
Texas	13	22	18	19	14	17
Utah	3	0	5	3	1	4
Vermont	1	0	0	0	0	0
Virginia	1	2	1	1	3	1
Washington	1	3	2	3	4	0
West Virginia	1	2	1	2	0	2
Wisconsin	4	0	0	4	2	4
Wyoming	1	1	1	0	0	2

Source: National Center for Health Statistics

TABLE 25 - Number of Maternal Deaths, Blacks

	1980	1981	1982	1983	1984	1985
United States	127	120	108	107	117	124
Alabama	3	4	9	5	5	6
Alaska	0	0	0	0	0	0
Arizona	0	0	0	0	0	0
Arkansas	1	1	0	2	2	5
California	16	6	9	8	10	5
Colorado	2	1	0	0	1	2
Connecticut	0	0	1	0	0	1
Delaware	0	0	0	0	0	0
District of Columbia	1	2	3	0	0	1
Florida	6	6	5	12	10	13
Georgia	6	8	7	9	8	12
Hawaii	0	0	0	0	0	0
Idaho	0	0	0	0	0	0
Illinois	5	15	6	5	12	7
Indiana	0	1	0	0	3	1
Iowa	0	0	0	1	0	0
Kansas	2	2	2	1	1	0
Kentucky	2	1	1	0	0	0
Louisiana	7	8	5	4	3	7
Maine	0	0	0	0	0	0
Maryland	3	2	2	3	3	1
Massachusetts	0	1	0	1	1	1
Michigan	9	1	7	2	3	2
Minnesota	0	0	0	0	1	0
Mississippi	1	2	0	1	2	2
Missouri	3	0	0	2	0	0
Montana	0	0	0	0	0	0
Nebraska	0	0	0	0	0	0
Nevada	0	1	0	0	1	0
New Hampshire	0	0	0	0	0	0
New Jersey	3	4	2	3	4	3
New Mexico	0	0	0	0	0	1
New York	19	14	12	20	17	16
North Carolina	3	6	6	4	6	2
North Dakota	0	0	0	0	0	0
Ohio	5	8	4	4	4	7
Oklahoma	3	2	0	1	1	2
Oregon	0	0	0	1	1	0
Pennsylvania	5	2	3	3	5	4
Rhode Island	1	0	0	0	0	0
South Carolina	4	3	6	3	2	4
South Dakota	0	0	0	0	0	0
Tennessee	2	1	3	2	4	1
Texas	9	10	11	4	3	12
Utah	0	0	0	0	0	0
Vermont	0	0	0	0	0	0
Virginia	3	4	2	3	3	4
Washington	0	1	1	2	0	2
West Virginia	2	0	0	1	0	0
Wisconsin	1	3	1	0	1	0
Wyoming	0	0	0	0	0	0

Source: National Center for Health Statistics

TABLE 26 - Number of Maternal Deaths, Nonwhites

	1980	1981	1982	1983	1984	1985
United States	141	125	121	120	126	139
Alabama	3	4	9	5	5	6
Alaska	1	0	0	0	0	0
Arizona	0	1	0	2	0	0
Arkansas	1	1	0	2	2	5
California	18	6	13	12	14	11
Colorado	2	1	0	1	1	2
Connecticut	0	0	1	0	0	1
Delaware	0	0	0	0	0	0
District of Columbia	1	2	3	0	0	1
Florida	7	6	6	13	11	13
Georgia	7	8	7	9	8	12
Hawaii	1	1	1	0	1	1
Idaho	0	0	0	0	0	0
Indiana	0	2	0	0	3	1
Illinois	5	15	7	5	12	7
Iowa	0	0	0	2	0	0
Kansas	2	2	2	1	1	1
Kentucky	2	1	1	0	0	1
Louisiana	7	8	5	4	3	7
Maine	0	0	0	0	0	0
Maryland	4	2	2	3	3	1
Massachusetts	0	1	0	1	1	1
Michigan	9	1	8	2	3	2
Minnesota	0	0	0	0	1	0
Mississippi	1	2	0	1	2	2
Missouri	3	0	0	2	0	0
Montana	0	0	0	0	0	0
Nebraska	0	0	0	0	0	0
Nevada	0	1	0	0	1	0
New Hampshire	0	0	0	0	0	0
New Jersey	3	4	3	3	4	3
New Mexico	0	0	1	0	1	2
New York	20	15	13	20	17	16
North Carolina	3	7	7	5	6	3
North Dakota	0	0	0	0	0	1
Ohio	5	8	4	4	4	7
Oklahoma	4	2	0	2	1	2
Oregon	1	0	0	2	1	0
Pennsylvania	6	2	3	4	5	4
Rhode Island	1	0	0	0	0	0
South Carolina	5	3	6	3	2	4
South Dakota	1	0	0	0	0	2
Tennessee	2	1	3	2	4	1
Texas	9	10	11	4	4	12
Utah	0	0	0	0	0	0
Vermont	0	0	0	0	0	0
Virginia	3	4	2	3	3	4
Washington	0	1	2	2	0	3
West Virginia	3	0	0	1	0	0
Wisconsin	1	3	1	0	1	0
Wyoming	0	0	0	0	0	0

Source: National Center for Health Statistics

IMMUNIZATION

Introduction

Immunizations are among the most powerful tools for preventing disease. Since the introduction of mass vaccination programs in the early 1960s, the incidence of measles, mumps, rubella, diphtheria, and polio has declined 98 percent, and smallpox has been eradicated.[49] However, the need to maintain high levels of immunization remains since the childhood diseases' causal agents have not been eliminated and, therefore, children who are not immunized remain at risk. The public and private health sectors need to continue their efforts to immunize a large percentage of the population, educate the public on the use of vaccines, and develop effective disease reporting and surveillance systems.

The consequences of childhood diseases can have lifelong effects on children and can sometimes lead to death. Measles can lead to middle ear infections, encephalitis (inflammation of the brain), and a chronic nervous system reaction that can end in death. One out of every 3,000 reported measles cases results in death.[50] While mumps seldom causes serious medical problems in younger children, it can lead to encephalitis and meningitis (inflammation of the spinal cord covering) in older children and adults. Pertussis, otherwise known as whooping cough, results in death for one to two percent of infected infants. Some children who survive pertussis are left paralyzed, mentally retarded, or otherwise impaired. Rubella, commonly known as German measles, is relatively harmless in young children, resulting in a slight fever, a rash, and swollen glands. However, in pregnant women, the consequences can be severe resulting in miscarriage, stillbirth, or serious birth defects.[51]

Eighteen objectives make up this priority area. They call for lower incidence rates for several childhood diseases and aim to immunize a greater percentage of the population. This report examines state incidence rates for measles, mumps, rubella, and pertussis.

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[49] *Midcourse Review*, p. 59.

[50] Kay Johnson, Who Is Watching Our Children's Health? Immunization Status of American Children. Washington, D.C.: Children's Defense Fund, December 1987, p. 20-21.

[51] Ibid., pp. 21-26.

Measles

OBJECTIVE: By 1990, reported measles incidence should be reduced to less than 500 cases per year. All cases will be the result of importation and will be confined within two generations of spread.

National Trends

It is unlikely that this objective will be met even though the incidence of measles has declined substantially since the measles vaccine was licensed in 1963. Before 1963, measles cases averaged 500,000 per year; from 1981 to 1986, measles cases ranged between 1,500 and 6,300 per year.[52] The number of measles cases hit a record low of 1,497 in 1983, but then increased to 2,587 in 1984, to 2,822 in 1985, and to 6,282 in 1986. The incidence rate more than doubled, from a rate of 1.2 per 100,000 in 1985 to 2.6 per 100,000 in 1986. However, for the first 26 weeks of 1987, a provisional total of 2,637 measles cases was reported to the Centers for Disease Control. This total is 33 percent less than the 3,921 cases reported for the same period in 1986.[53] Two hundred eighty-seven cases in 1985 and 251 cases in 1986 were classified as international importations.[54]

State Progress

It is difficult to predict the future course of measles incidence rates on a state-by-state basis because trends, for the most part, are not consistent. Since 1983, the measles incidence rate has increased consistently in several states, including California, Illinois, Texas, and Washington. In these states, rates increased in 1984 and either remained steady or increased further in 1985 and 1986. Other states, such as Hawaii, Idaho, Indiana, Michigan, Montana, New Hampshire, and Wisconsin, have had measles epidemics with incidence rates of more than five to six times the national average one year, and low incidence rates the next. In 1980 and in 1986, four states reported no cases of measles.

The U.S. incidence rate for 1986 was 2.6 per 100,000. In 1986, ten states accounted for over three-fourths of all measles cases (Arizona, Arkansas, California, Florida, Illinois, New Jersey, New York, South Carolina, Texas, and Wisconsin). Ten states had incidence rates greater than 4 per 100,000 population (Arizona, Arkansas, Illinois, Iowa, Kansas, New Hampshire, New Jersey, New York, South Carolina, and Wisconsin). For the 1987-1988 school year, all states have an immunization requirement for school registration for kindergarten through 12th grade, except Louisiana, Michigan, New Hampshire, West Virginia, and Wyoming, who require immunization for new entrants only.

Discussion

The increase in reported measles cases in recent years was partially caused by several outbreaks of measles among preschool children living in poor, urban areas.[55] Preschool children have the highest incidence rate of measles. In 1986, 83 percent of measles cases among preschoolers were preventable; in 1985, 74 percent of these cases were preventable. Overall, one-third of measles cases in 1986 were preventable.[56]

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[52] *MMWR* (Vol. 35, No. 22), 1986.

[53] *MMWR* (Vol. 37, No. 4), 1988.

[54] *MMWR* (Vol. 35, No. 22), 1986.

Outbreaks on college campuses have also contributed to increases in reported cases of measles. Twenty-six college campuses reported 352 cases of measles in 1985, and in 1986, 174 cases occurred on 21 campuses.[57] The number of measles cases can be reduced through greater efforts to vaccinate children as soon as they reach 15 months of age and through school-based efforts to require students to present immunization records before registering.

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[55] *Who is Watching Our Children's Health?*, p. 21.

[56] *MMWR* (Vol. 35, No. 22), 1986.

[57] *MMWR* (Vol. 36, No. 14), 1987.

TABLE 27 - Number of Measles Cases

	1980	1981	1982	1983	1984	1985	1986
United States	13,506	3124	1763	1497	2587	2822	6282
Alabama	22	2	2	5	3	-	2
Alaska	6	-	1	2	-	-	-
Arizona	403	7	17	1	1	241	258
Arkansas	14	25	-	13	8	-	283
California	1051	339	831	181	326	265	486
Colorado	24	11	8	3	6	15	12
Connecticut	25	10	6	9	14	7	9
Delaware	4	-	-	-	-	-	1
District of Columbia	5	1	1	-	8	31	2
Florida	432	345	246	159	30	117	400
Georgia	851	111	-	8	6	8	93
Hawaii	6	7	6	2	142	31	37
Idaho	-	1	-	10	23	139	1
Illinois	351	24	24	216	186	346	700
Indiana	97	9	2	406	3	57	39
Iowa	20	1	-	-	-	-	134
Kansas	67	1	44	6	5	1	102
Kentucky	57	2	1	1	1	5	6
Louisiana	15	4	16	29	8	42	4
Maine	33	5	-	-	-	1	13
Maryland	84	5	5	11	22	115	35
Massachusetts	59	59	4	9	49	118	37
Michigan	250	34	62	45	464	60	106
Minnesota	1104	3	-	1	47	6	50
Mississippi	99	-	6	21	-	1	6
Missouri	67	1	2	1	6	5	32
Montana	2	-	-	4	-	137	9
Nebraska	83	4	3	-	-	-	1
Nevada	12	10	-	-	-	-	2
New Hampshire	332	9	3	3	36	-	43
New Jersey	856	61	6	27	7	30	881
New Mexico	12	9	-	-	88	6	38
New York	1945	336	210	90	170	166	1049
North Carolina	130	3	2	1	1	9	4
North Dakota	-	-	-	-	-	2	25
Ohio	380	20	1	88	11	60	10
Oklahoma	775	6	30	1	8	1	39
Oregon	1	5	17	10	-	5	11
Pennsylvania	1139	762	7	3	5	40	28
Rhode Island	2	-	-	-	-	-	2
South Carolina	159	2	-	4	1	3	301
South Dakota	-	-	-	-	-	-	-
Tennessee	170	2	6	0	2	1	56
Texas	181	851	129	37	642	450	398
Utah	47	-	3	22	27	-	13
Vermont	226	3	2	-	7	-	-
Virginia	339	18	14	23	5	28	60
Washington	178	3	42	43	178	176	176
West Virginia	10	9	3	-	-	33	2
Wisconsin	1381	3	-	1	41	59	286
Wyoming	-	1	1	1	-	5	-

Source: Centers for Disease Control
Symbol: dash (-) = Zero cases were reported

TABLE 28 - Incidence of Measles Cases Per 100,000 Population

	1980	1981	1982	1983	1984	1985	1986
United States	5.96	1.36	.76	.64	1.09	1.18	2.61
Alabama	.56	.05	.05	.13	.08	.00	.05
Alaska	1.49	.00	.22	.41	.00	.00	.00
Arizona	14.83	.25	.59	.03	.03	7.55	7.77
Arkansas	.61	1.09	.00	.56	.34	.00	11.93
California	4.44	1.40	3.35	.72	1.26	1.01	1.80
Colorado	.83	.37	.26	.10	.19	.46	.37
Connecticut	.80	.32	.19	.29	.44	.22	.28
Delaware	.67	.00	.00	.00	.00	.00	.16
District of Columbia	.78	.16	.16	.00	1.28	4.98	.32
Florida	4.43	3.38	2.35	1.48	.27	1.03	3.43
Georgia	15.58	1.99	.00	.14	.10	.13	1.52
Hawaii	.62	.71	.60	.20	13.71	2.95	3.48
Idaho	.00	.10	.00	1.01	2.30	13.84	.10
Illinois	3.07	.21	.21	1.88	1.61	3.00	6.06
Indiana	1.77	.16	.04	7.41	.05	1.04	.71
Iowa	.69	.03	.00	.00	.00	.00	4.70
Kansas	2.83	.04	1.83	.25	.20	.04	4.15
Kentucky	1.56	.05	.03	.03	.03	.13	.16
Louisiana	.36	.09	.37	.65	.18	.94	.09
Maine	2.93	.44	.00	.00	.00	.09	1.11
Maryland	1.99	.12	.12	.26	.51	2.62	.78
Massachusetts	1.03	1.03	.07	.16	.85	2.03	.63
Michigan	2.70	.37	.68	.50	5.12	.66	1.16
Minnesota	27.09	.07	.00	.02	1.13	.14	1.19
Mississippi	3.93	.00	.23	.81	.00	.04	.23
Missouri	1.36	.02	.04	.02	.12	.10	.63
Montana	.25	.00	.00	.49	.00	16.61	1.10
Nebraska	5.29	.25	.19	.00	.00	.00	.06
Nevada	1.50	1.18	.00	.00	.00	.00	.21
New Hampshire	36.05	.96	.32	.31	3.68	.00	4.19
New Jersey	11.62	.82	.08	.36	.09	.40	11.56
New Mexico	.92	.67	.00	.00	6.17	.41	2.57
New York	11.08	1.91	1.20	.51	.96	.94	5.90
North Carolina	2.21	.05	.03	.02	.02	.14	.06
North Dakota	.00	.00	.00	.00	.00	.29	3.68
Ohio	3.52	.19	.01	.82	.10	.56	.09
Oklahoma	25.62	.19	.93	.03	.24	.03	1.18
Oregon	.04	.19	.64	.38	.00	.19	.41
Pennsylvania	9.60	6.42	.06	.03	.04	.34	.24
Rhode Island	.21	.00	.00	.00	.00	.00	.21
South Carolina	5.09	.06	.00	.12	.03	.09	8.91
South Dakota	.00	.00	.00	.00	.00	.00	.00
Tennessee	3.70	.04	.13	.00	.04	.02	1.17
Texas	1.27	5.76	.84	.23	3.99	2.75	2.39
Utah	3.22	.00	.19	1.38	1.66	.00	.78
Vermont	44.23	.58	.38	.00	1.32	.00	.00
Virginia	6.34	.33	.26	.41	.09	.49	1.04
Washington	4.31	.07	.98	1.00	4.09	3.99	3.94
West Virginia	.51	.46	.15	.00	.00	1.70	.10
Wisconsin	29.35	.06	.00	.02	.86	1.24	5.98
Wyoming	.00	.20	.20	.19	.00	.98	.00

Source: State Population Estimates -- Census Bureau
Cases of Measles -- Centers for Disease Control

Mumps

OBJECTIVE: By 1990, reported mumps incidence should be reduced to less than 1,000 cases per year.

National Progress

The *Midcourse Review* reported that it was likely that this objective would be reached. The number of cases of mumps dropped from 8,576 in 1980 to 2,982 in 1985, the lowest annual total since 1968, when mumps became a reportable disease.[58] However, in 1986, the incidence of mumps increased to 7,790 cases, and in the first 48 weeks of 1987, there were 11,758 cases reported.[59] These data suggest that the objective may not be reached.

State Progress

As with other childhood diseases, it is difficult to predict trends of mumps incidence on a state-by-state basis because trends are erratic. Some states show very low incidence rates from 1980 through 1986, while others show epidemics one year and few cases the next. For instance, Tennessee had an incidence rate lower than 1 case per 100,000 population from 1980 through 1985, and then in 1986 experienced an epidemic with an incidence rate of over 30 cases per 100,000 population.

In 1986, 26 states reported more mumps cases than in 1985 and two states, Maine and Wyoming, reported no cases. Two states, Illinois, with 2,978 cases and Tennessee, with 1,476 cases, accounted for more than half of all mumps cases nationwide. Illinois, as a result of this outbreak, enacted a law requiring proof of mumps vaccination before school entry for kindergarten through grade 12.[60]

Discussion

The increase in cases of mumps from 1985 to 1986 was largely the result of illness in unvaccinated middle and high school students. Children under 15 years of age continue to have the highest incidence rate (4.1 cases per 100,000 in 1985).[61] School immunization laws have proven to be effective in reducing the incidence of mumps. In 1987, 31 of the 47 states reporting mumps (New Mexico, Oklahoma, and Oregon did not report) required proof of mumps vaccination before matriculation.[62]

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[58] *MMWR* (Vol. 35, No. 14), 1986.

[59] *MMWR* (Vol. 36, No. 48), 1987.

[60] *MMWR* (Vol. 35, No. 14), 1986.

[61] Ibid.

[62] *MMWR* (Vol. 36, No. 10), 1987.

TABLE 29 - Number of Mumps Cases

	1980	1981	1982	1983	1984	1985	1986
United States	8576	4941	5270	3355	3021	2982	7790
Alabama	36	19	10	2	6	2	4
Alaska	15	20	16	16	14	10	8
Arizona	46	39	63	97	203	127	209
Arkansas	26	7	9	3	9	7	183
California	485	474	496	360	426	429	354
Colorado	68	53	22	54	31	28	17
Connecticut	103	53	29	23	10	8	23
Delaware	42	10	13	10	3	1	1
District of Columbia	6	4	-	3	4	-	1
Florida	195	145	nn	nn	47	61	62
Georgia	18	38	30	63	22	30	46
Hawaii	24	26	21	20	22	19	24
Idaho	17	8	5	9	10	10	9
Illinois	437	343	315	215	249	292	2978
Indiana	170	123	48	56	77	44	283
Iowa	64	94	65	49	26	19	96
Kansas	129	140	111	77	62	51	61
Kentucky	765	49	22	21	11	8	133
Louisiana	67	6	6	1	-	2	11
Maine	309	47	42	30	30	9	-
Maryland	339	109	34	45	46	38	34
Massachusetts	130	91	75	20	22	14	16
Michigan	1011	416	410	526	202	329	468
Minnesota	20	8	455	30	7	1	84
Mississippi	62	5	11	7	19	nn	nn
Missouri	103	26	13	21	11	18	23
Montana	61	13	8	9	11	12	6
Nebraska	9	3	1	3	6	4	2
Nevada	9	17	8	5	7	66	11
New Hampshire	30	26	18	29	21	13	15
New Jersey	130	106	57	129	139	57	51
New Mexico	nn	nn	nn	nn	nn	nn	nn
New York	285	254	147	147	149	234	96
North Carolina	101	23	23	14	23	20	29
North Dakota	4	-	-	3	2	4	4
Ohio	1318	687	1775	591	518	302	150
Oklahoma	nn	nn	nn	nn	nn	nn	nn
Oregon	97	69	nn	nn	nn	nn	nn
Pennsylvania	555	421	160	92	56	68	63
Rhode Island	34	28	18	16	11	16	14
South Carolina	211	18	18	14	6	14	19
South Dakota	3	1	1	-	-	-	1
Tennessee	33	23	25	30	17	19	1476
Texas	212	227	255	225	219	321	239
Utah	29	24	24	17	14	6	16
Vermont	12	10	7	15	5	3	6
Virginia	87	134	44	37	20	49	46
Washington	166	165	102	55	56	42	30
West Virginia	128	120	124	60	43	78	58
Wisconsin	375	214	132	103	126	95	330
Wyoming	-	5	2	3	3	2	-

Source: Centers for Disease Control
Symbol: nn = Not notifiable, report of disease not required by State Health Department
Symbol: dash (-) = Zero cases were reported

TABLE 30 - Incidence of Mumps Cases Per 100,000 Population

	1980	1981	1982	1983	1984	1985	1986
United States	3.79	2.15	2.27	1.43	1.28	1.25	3.23
Alabama	.92	.48	.25	.05	.15	.05	.10
Alaska	3.73	4.82	3.59	3.31	2.77	1.92	1.50
Arizona	1.69	1.38	2.17	3.26	6.61	3.98	6.30
Arkansas	1.14	.30	.39	.13	.38	.30	7.72
California	2.05	1.95	2.00	1.42	1.65	1.63	1.31
Colorado	2.35	1.78	.72	1.72	.97	.87	.52
Connecticut	3.31	1.70	.93	.73	.32	.25	.72
Delaware	7.07	1.68	2.17	1.65	.49	.16	.16
District of Columbia	.94	.63	.00	.48	.64	.00	.16
Florida	2.00	1.42	nn	nn	.43	.54	.53
Georgia	.33	.68	.53	1.10	.38	.50	.75
Hawaii	2.49	2.65	2.10	1.96	2.12	1.81	2.26
Idaho	1.80	.83	.51	.91	1.00	1.00	.90
Illinois	3.82	2.99	2.74	1.87	2.16	2.53	25.78
Indiana	3.10	2.24	.88	1.02	1.40	.80	5.14
Iowa	2.20	3.22	2.24	1.69	.90	.66	3.37
Kansas	5.46	5.86	4.61	3.17	2.54	2.08	2.48
Kentucky	20.90	1.33	.60	.57	.30	.21	3.57
Louisiana	1.59	.14	.14	.02	.00	.04	.24
Maine	27.47	4.14	3.69	2.62	2.59	.77	.00
Maryland	8.04	2.56	.80	1.05	1.06	.87	.76
Massachusetts	2.27	1.58	1.31	.35	.38	.24	.27
Michigan	10.92	4.52	4.50	5.81	2.23	3.62	5.12
Minnesota	.49	.19	11.01	.72	.17	.02	1.99
Mississippi	2.46	.20	.43	.27	.73	.00	.00
Missouri	2.09	.53	.26	.42	.22	.36	.45
Montana	7.75	1.63	.99	1.10	1.33	1.45	.73
Nebraska	.57	.19	.06	.19	.37	.25	.13
Nevada	1.13	2.01	.91	.56	.76	7.04	1.14
New Hampshire	3.26	2.77	1.90	3.02	2.15	1.30	1.46
New Jersey	1.77	1.43	.77	1.73	1.85	.75	.67
New Mexico	nn	nn	nn	nn	nn	nn	nn
New York	1.62	1.45	.84	.83	.84	1.32	.54
North Carolina	1.72	.39	.38	.23	.37	.32	.46
North Dakota	.61	.00	.00	.44	.29	.58	.59
Ohio	12.21	6.36	16.47	5.50	4.82	2.81	1.40
Oklahoma	nn	nn	nn	nn	nn	nn	nn
Oregon	3.68	2.[illegible]9	nn	nn	nn	nn	nn
Pennsylvania	4.68	3.54	1.35	.77	.47	.57	.53
Rhode Island	3.59	2.94	1.89	1.68	1.15	1.65	1.44
South Carolina	6.76	.56	.56	.43	.18	.42	.56
South Dakota	.43	.14	.14	.00	.00	.00	.14
Tennessee	.72	.50	.54	.64	.36	.40	30.73
Texas	1.49	1.54	1.66	1.42	1.36	1.96	1.43
Utah	1.98	1.58	1.54	1.07	.86	.36	.96
Vermont	2.3[illegible]	1.94	1.35	2.85	.94	.56	1.11
Virginia	1.63	2.46	.80	.67	.35	.86	.79
Washington	4.02	3.89	2.38	1.28	1.29	.95	.67
West Virginia	6.56	6.12	6.32	3.05	2.20	4.03	3.02
Wisconsin	7.97	4.52	2.78	2.17	2.64	1.99	6.90
Wyoming	.00	1.01	.39	.58	.58	.39	.00

Source: Cases of Mumps -- Centers for Disease Control
State Population Estimates -- Census Bureau
Symbol: nn = Not notifiable, report of disease not required by State Health Department

Rubella

OBJECTIVE: By 1990, the reported rubella incidence should be reduced to less than 1,000 cases per year.

National Progress

This objective was achieved in 1983 and the incidence rate continued to decline in 1984, 1985, and 1986. The number of reported cases in the first 48 weeks of 1987, 325 compared to 505 for the same 1986 time period, suggests a further decline for 1987.[63] Age-specific incidence rates for 1984 through 1986 show that children younger than five years of age continue to have the highest overall incidence rate of rubella.

State Progress

In 1986, 18 states reported no rubella cases compared to one state in 1980. Trends show a reduction in the incidence rate of rubella cases in all states from 1980 through 1985, with the exception of small fluctuations in Hawaii and New York. In 1986, California accounted for approximately one-half of all reported rubella cases and had the highest incidence rate of .93 cases per 100,000 population.

Discussion

Rubella is generally a mild but highly contagious viral illness that affects children.[64] However, rubella vaccines have been shown to be safe and highly effective and to provide durable immunity.[65] The decline in reported cases to 551 in 1986 is encouraging, and clearly suggests the vaccine is being used effectively.[66]

By far the most serious consequence of rubella infection is congenital rubella infection (CRI), especially during the first trimester of pregnancy.[67] While there were no reported cases of CRI in 1985, there were 14 reported cases in 1986.[68, 69]

Because of the serious consequences of CRI, it is important that continued immunization be encouraged. A danger is that if vaccine prices increase significantly, especially in combination with a reduction in funds available for conducting rubella immunization programs, the number of rubella cases reported each year may show increases rather than remaining stable or continuing to decline.[70]

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[63] *MMWR* (Vol. 36, No. 48), 1987.

[64] *Who Is Watching Our Children's Health?*, p. 24.

[65] *MMWR* (Vol. 33, No. 4SS), 1984.

[66] *MMWR* (Vol. 35, No. 55), 1987.

[67] *MMWR* (Vol. 33, No. 4SS), 1984.

[68] *Midcourse Review*, p. 63.

[69] *MMWR* (Vol. 35, No. 55), 1987.

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[70] *Midcourse Review*, p. 62.

TABLE 31 - Number of Rubella Cases

	1980	1981	1982	1983	1984	1985	1986
United States	3904	2007	2325	970	752	618	551
Alabama	3	1	-	1	3	-	-
Alaska	12	1	5	1	1	1	-
Arizona	51	22	29	8	5	1	2
Arkansas	5	7	2	-	5	1	1
California	929	533	1437	298	197	146	250
Colorado	12	30	6	1	2	-	1
Connecticut	23	13	6	3	1	4	1
Delaware	1	2	1	-	2	2	-
District of Columbia	1	-	-	-	-	-	-
Florida	109	67	32	70	28	30	12
Georgia	-	39	18	16	2	3	4
Hawaii	5	15	9	1	5	44	8
Idaho	30	4	7	8	1	2	-
Illinois	188	125	87	63	68	20	75
Indiana	388	143	31	30	5	1	-
Iowa	10	5	-	-	1	1	1
Kansas	119	71	21	36	30	7	9
Kentucky	46	27	31	18	6	3	4
Louisiana	13	9	1	10	-	-	-
Maine	129	33	-	-	1	-	-
Maryland	69	1	36	3	1	6	1
Massachusetts	76	23	2	8	16	5	5
Michigan	129	44	57	21	22	17	24
Minnesota	28	9	7	9	4	2	1
Mississippi	2	-	16	-	3	-	-
Missouri	45	2	38	-	-	7	1
Montana	46	3	7	4	-	-	2
Nebraska	4	1	-	-	-	-	-
Nevada	9	11	12	1	4	1	3
New Hampshire	47	54	13	5	1	3	1
New Jersey	109	47	18	3	23	11	4
New Mexico	5	5	6	-	1	2	-
New York	331	172	91	119	210	205	30
North Carolina	48	5	2	10	-	1	-
North Dakota	6	-	-	-	3	2	1
Ohio	9	3	4	2	2	-	1
Oklahoma	8	4	3	1	-	2	-
Oregon	73	55	10	14	2	2	4
Pennsylvania	157	11	2	26	1	14	1
Rhode Island	9	-	1	-	-	-	2
South Carolina	58	8	-	1	-	3	-
South Dakota	2	-	1	-	-	-	-
Tennessee	41	13	2	-	-	1	-
Texas	131	176	120	117	75	52	75
Utah	31	12	31	7	7	-	15
Vermont	3	-	-	5	-	-	1
Virginia	42	9	12	2	1	2	-
Washington	97	108	58	10	2	16	9
West Virginia	27	23	3	-	-	9	-
Wisconsin	187	116	42	29	8	1	1
Wyoming	1	15	8	9	3	-	1

Source: Centers for Disease Control
Symbol: dash (-) = Zero cases were reported

TABLE 32 - Incidence of Rubella Cases Per 100,000 Population

	1980	1981	1982	1983	1984	1985	1986
United States	1.72	.88	1.00	.41	.32	.26	.23
Alabama	.08	.03	.00	.03	.08	.00	.00
Alaska	2.99	.24	1.12	.21	.20	.19	.00
Arizona	1.88	.78	1.00	.27	.16	.03	.06
Arkansas	.22	.30	.09	.00	.21	.04	.04
California	3.93	2.20	5.80	1.18	.76	.55	.93
Colorado	.42	1.01	.20	.03	.06	.00	.03
Connecticut	.74	.42	.19	.10	.03	.13	.03
Delaware	.17	.34	.17	.00	.33	.32	.00
District of Columbia	.16	.00	.00	.00	.00	.00	.00
Florida	1.12	.66	.31	.65	.25	.26	.10
Georgia	.00	.70	.32	.28	.03	.05	.07
Hawaii	.52	1.53	.90	.10	.48	4.19	.75
Idaho	3.18	.41	.72	.81	.10	.20	.00
Illinois	1.65	1.09	.76	.55	.59	.17	.65
Indiana	7.07	2.60	.57	.55	.09	.02	.00
Iowa	.34	.17	.00	.00	.03	.03	.04
Kansas	5.03	2.97	.87	1.48	1.23	.29	.37
Kentucky	1.26	.73	.84	.48	.16	.08	.11
Louisiana	.31	.21	.02	.23	.00	.00	.00
Maine	11.47	2.91	.00	.00	.09	.00	.00
Maryland	1.64	.02	.84	.07	.02	.14	.02
Massachusetts	1.32	.40	.03	.14	.28	.09	.09
Michigan	1.39	.48	.63	.23	.24	.19	.26
Minnesota	.69	.22	.17	.22	.10	.05	.02
Mississippi	.08	.00	.62	.00	.12	.00	.00
Missouri	.92	.04	.77	.00	.00	.14	.02
Montana	5.84	.38	.87	.49	.00	.00	.24
Nebraska	.25	.06	.00	.00	.00	.00	.00
Nevada	1.13	1.30	1.37	.11	.44	.11	.31
New Hampshire	5.10	5.76	1.37	.52	.10	.30	.10
New Jersey	1.48	.63	.24	.04	.31	.15	.05
New Mexico	.38	.37	.44	.00	.07	.14	.00
New York	1.89	.98	.52	.67	1.19	1.16	.17
North Carolina	.82	.08	.03	.16	.00	.02	.00
North Dakota	.92	.00	.00	.00	.44	.29	.15
Ohio	.08	.03	.04	.02	.02	.00	.01
Oklahoma	.26	.13	.09	.03	.00	.06	.00
Oregon	2.77	2.07	.37	.53	.07	.07	.15
Pennsylvania	1.32	.09	.02	.22	.01	.12	.01
Rhode Island	.95	.00	.10	.00	.00	.00	.21
South Carolina	1.86	.25	.00	.03	.00	.09	.00
South Dakota	.29	.00	.14	.00	.00	.00	.00
Tennessee	.89	.28	.04	.00	.00	.02	.00
Texas	.92	1.19	.78	.74	.47	.32	.45
Utah	2.12	.79	1.99	.44	.43	.00	.90
Vermont	.59	.00	.00	.95	.00	.00	.18
Virginia	.79	.17	.22	.04	.02	.04	.00
Washington	2.35	2.55	1.36	.23	.05	.36	.20
West Virginia	1.38	1.17	.15	.00	.00	.46	.00
Wisconsin	3.97	2.45	.88	.61	.17	.02	.02
Wyoming	.21	3.04	1.57	1.74	.58	.00	.20

Source: Cases of Rubella -- Centers for Disease Control
State Population Estimates -- Census Bureau

Pertussis

OBJECTIVE: By 1990, the reported pertussis incidence should be reduced to less than 1,000 per year.

National Progress

It is unlikely that this objective will be met by 1990 since the incidence of pertussis has increased every year since 1981, with the exception of 1984. The reported incidence of pertussis was 4,195 cases in 1986 compared to 1,730 in 1980.

State Progress

As with the other childhood diseases, it is difficult to predict the pertussis incidence rate for individual states in 1990. Overall, the incidence rate is increasing, but outbreaks in a few states have accounted for one-half of all cases. In 1986, seven states (California, Delaware, Kansas, Maryland, New York, Ohio, and Washington) accounted for nearly 60 percent of all cases. Eight states, Delaware (35.7), Hawaii (4.8), Idaho (5.29), Kansas (49.96), Maryland (3.72), New Hampshire (8.08), Oklahoma (4.05), and Washington (3.65), had incidence rates at least two times greater than the national incidence rate of 1.74 per 100,000 population.

Discussion

While the majority of cases occurred among infants and young children, there has been a gradual trend toward a larger proportion of reported cases in adults. According to the CDC, problems with meeting the objective are threefold: the growing interest in pertussis has led to improved surveillance and greater identification of total cases, resulting in more cases reported; the effect of overall vaccine coverage is limited by age, since the pertussis agent is recommended only for persons under seven years of age; and the three-dose coverage of children two years of age is estimated to be only 80 to 85 percent effective.

TABLE 33 - Number of Pertussis Cases

	1980	1981	1982	1983	1984	1985	1986
United States	1730	1248	1895	2463	2276	3589	4195
Alabama	3	-	5	5	2	30	25
Alaska	5	1	-	4	5	30	5
Arizona	25	13	27	32	27	49	78
Arkansas	13	5	7	28	24	18	24
California	147	185	115	125	163	242	299
Colorado	29	24	36	138	49	110	84
Connecticut	6	2	5	7	6	13	27
Delaware	1	2	9	5	2	2	226
District of Columbia	-	-	-	5	-	-	-
Florida	68	78	59	57	91	75	82
Georgia	126	57	43	70	20	102	136
Hawaii	-	3	28	3	102	24	51
Idaho	10	4	12	16	7	30	53
Illinois	142	88	164	179	29	86	51
Iowa	2	9	9	9	15	34	19
Indiana	164	87	35	60	259	224	40
Kansas	15	8	14	130	55	31	1229
Kentucky	37	25	7	14	2	9	5
Louisiana	38	8	24	11	12	20	16
Maine	5	13	4	5	2	9	1
Maryland	2	1	80	39	59	328	166
Massachusetts	22	15	32	40	22	49	82
Michigan	38	30	32	43	31	54	63
Minnesota	20	16	34	49	16	131	50
Mississippi	15	8	16	5	4	4	1
Missouri	30	24	17	23	23	35	32
Montana	3	12	1	2	20	10	23
Nebraska	6	6	1	5	17	11	10
Nevada	1	2	-	1	2	-	4
New Hampshire	13	8	12	10	17	111	83
New Jersey	14	12	26	17	12	12	20
New Mexico	29	16	8	13	13	15	29
New York	190	122	375	180	129	160	163
North Carolina	35	12	51	34	37	40	88
North Dakota	7	1	-	3	-	10	6
Ohio	88	43	98	158	79	120	169
Oklahoma	30	2	9	348	247	207	134
Oregon	2	18	27	10	31	54	16
Pennsylvania	52	35	204	251	56	92	52
Rhode Island	3	11	11	5	4	23	7
South Carolina	18	11	16	14	2	3	18
South Dakota	3	2	6	8	8	11	14
Tennessee	37	16	26	8	7	27	18
Texas	82	91	79	95	60	379	112
Utah	10	8	4	31	7	60	44
Vermont	-	-	2	8	25	4	5
Virginia	10	10	29	50	19	21	56
Washington	77	58	36	20	326	92	163
West Virginia	12	6	15	9	11	5	28
Wisconsin	42	33	41	75	114	382	111
Wyoming	3	7	4	6	6	1	4

Source: Centers for Disease Control
Symbol: dash (-) = Zero cases were reported

TABLE 34 - Incidence of Pertussis Cases Per 100,000 Population

	1980	1981	1982	1983	1984	1985	1986
United States	.76	.54	.82	1.05	.96	1.50	1.74
Alabama	.08	.00	.13	.13	.05	.75	.62
Alaska	1.24	.24	.00	.83	.99	5.75	.94
Arizona	.92	.46	.93	1.07	.88	1.53	2.35
Arkansas	.57	.22	.30	1.20	1.02	.76	1.01
California	.62	.76	.46	.49	.63	.92	1.11
Colorado	1.00	.80	1.17	4.38	1.54	3.40	2.57
Connecticut	.19	.06	.16	.22	.19	.41	.85
Delaware	.17	.34	1.50	.83	.33	.32	35.70
District of Columbia	.00	.00	.00	.80	.00	.00	.00
Florida	.70	.77	.56	.53	.82	.66	.70
Georgia	2.31	1.02	.76	1.22	.34	1.71	2.23
Hawaii	.00	.31	2.81	.29	9.85	2.28	4.80
Idaho	1.06	.41	1.23	1.62	.70	2.99	5.29
Illinois	1.24	.77	1.43	1.56	.25	.75	.44
Indiana	.04	.16	.16	.16	.27	.62	.35
Iowa	5.63	2.98	1.20	2.07	8.92	7.78	1.40
Kansas	.63	.33	.58	5.35	2.25	1.27	49.96
Kentucky	1.01	.68	.19	.38	.05	.24	.13
Louisiana	.90	.19	.55	.25	.27	.45	.36
Maine	.44	1.15	.35	.44	.17	.77	.09
Maryland	.05	.02	1.87	.91	1.36	7.47	3.72
Massachusetts	.38	.26	.56	.69	.38	.84	1.41
Michigan	.41	.33	.35	.47	.34	.59	.69
Minnesota	.49	.39	.82	1.18	.38	3.13	1.19
Mississippi	.60	.31	.62	.19	.15	.15	.04
Missouri	.61	.49	.34	.46	.46	.70	.63
Montana	.38	1.51	.12	.25	2.43	1.21	2.81
Nebraska	.38	.38	.06	.31	1.06	.69	.63
Nevada	.13	.24	.00	.11	.22	.00	.42
New Hampshire	1.41	.85	1.27	1.04	1.74	11.11	8.08
New Jersey	.19	.16	.35	.23	.16	.16	.26
New Mexico	2.23	1.20	.58	.93	.91	1.03	1.96
New York	1.08	.69	2.13	1.02	.73	.90	.92
North Carolina	.60	.20	.85	.56	.60	.64	1.39
North Dakota	1.07	.15	.00	.44	.00	1.46	.88
Ohio	.81	.40	.91	1.47	.74	1.12	1.57
Oklahoma	.99	.06	.28	10.51	7.46	6.26	4.05
Oregon	.08	.68	1.01	.38	1.16	2.01	.59
Pennsylvania	.44	.29	1.72	2.11	.47	.78	.44
Rhode Island	.32	1.16	1.15	.52	.42	2.38	.72
South Carolina	.58	.35	.50	.43	.06	.09	.53
South Dakota	.43	.29	.86	1.14	1.13	1.55	1.98
Tennessee	.81	.34	.56	.17	.15	.57	.37
Texas	.58	.62	.51	.60	.37	2.31	.67
Utah	.68	.53	.26	1.94	.43	3.65	2.64
Vermont	.00	.00	.38	1.52	4.72	.75	.92
Virginia	.19	.18	.53	.90	.34	.37	.97
Washington	1.86	1.37	.84	.46	7.49	2.09	3.65
West Virginia	.62	.31	.76	.46	.56	.26	1.46
Wisconsin	.89	.70	.86	1.58	2.39	8.00	2.32
Wyoming	.64	1.42	.78	1.16	1.17	.20	.79

Source: State Population Estimates -- Census Bureau
Cases of Pertussis -- Centers for Disease Control

SEXUALLY TRANSMITTED DISEASES

Introduction

Sexually transmitted diseases (STDs) can have serious health consequences, the most serious resulting in death. Pregnant women suffer greater risks of stillbirth, infant death, and prematurity when afflicted with an STD. Pelvic inflammatory disease, an STD caused by an infection in the uterus, is estimated to cause infertility in 100,000 to 150,000 women each year and has contributed to an increase in ectopic pregnancy (a possibly life-threatening condition in which the embryo implants itself in one of the fallopian tubes). Between 1965 and 1981, the ectopic pregnancy incidence rate tripled.[71] Increased risk of cancer, such as vulva and cervical cancer for women and anal carcinoma for homosexual males, is also associated with certain STDs.[72]

The 11 sexually transmitted disease objectives cover a wide range of targets, from lowering the incidence of several STDs to improving public and professional awareness, services, surveillance, and evaluations of STDs. Acquired immunodeficiency syndrome (AIDS), the most dangerous STD of the 1980s, had not yet been identified when the 1990 objectives were formulated. This report examines state trends for gonorrhea and primary and secondary syphilis.

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[71] Willard Cates, Epidemiology and Control of Sexually Transmitted Disease. Felman, Y.M. (ed), Sexually Transmitted Disease. New York, New York: Churchill Livingstone, 1986.

[72] Ibid.

Gonorrhea

OBJECTIVE: By 1990, reported gonorrhea incidence should be reduced to a rate of 280 cases per 100,000 population.

National Trends

It is uncertain whether this objective will be met. Based on data from 1980 through 1985, the *Midcourse Review* projected that this objective would be met. The gonorrhea incidence rate decreased steadily from 1980 through 1984 (from 443.19 to 371.49 per 100,000 population). However, the overall rate of decline slowed considerably after 1983, with progress being reversed in 1985 when the rate increased to 381.76 per 100,000. The rate decreased again in 1986 to 373.68, and again in 1987 to 339.5.

State Progress

By 1990, 34 states are projected to meet this objective. In 1986, 27 had already met it. In 48 states, the gonorrhea incidence rate has declined since 1980. In addition, several states unlikely to meet the objective by 1990 show significant reductions in gonorrhea incidence rates. These states, which include Alabama (3.06 percent annual average decline), California (4.24), Georgia (3.90), Louisiana (5.82), Missouri (3.16), and South Carolina (4.75), had incidence rates that declined more than the national annual average of 2.8 percent.

In three states, Michigan, New York, and Rhode Island, the gonorrhea incidence rate has increased since 1980. New York had the largest increase -- 40 percent between 1985 and 1986. Delaware, the District of Columbia, Maryland, and Pennsylvania had relatively stable incidence rates from 1980 through 1986. The District of Columbia had the highest incidence of gonorrhea in 1986, with 2,686 cases per 100,000 population, nearly four times the next highest incidence rate of 682 cases per 100,000 population in Georgia.

Discussion

Recent increases in gonorrhea rates among females and in the number of resistant gonorrhea strains have undermined earlier progress (1980 to 1984) in reducing gonorrhea incidence.[73] In 1985 and 1986, there were increases of 98 percent and 90 percent, respectively, in the number of reported cases of gonorrhea from resistant strains.[74] Most of the decline in gonorrhea incidence rates appears to be concentrated in the male population, where sexual behavior changes have been affected by the AIDS epidemic. In 1986, the entire decline occurred among males.[75] However, in 1987 the rates for both males and females declined.

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[73] *MMWR* (Vol. 36, No. 12), 1987.

[74] Ibid.

[75] Ibid.

TABLE 35 - Number of Gonorrhea Cases

	1980	1981	1982	1983	1984	1985	1986
United States	1,004,029	992,864	960,633	900,435	878,556	911,419	900,868
Alabama	24,020	24,478	24,497	22,626	22,938	23,178	20,744
Alaska	4076	4046	3449	3167	2933	3178	2661
Arizona	10,575	11,545	8973	8527	7795	8729	8448
Arkansas	10,129	9822	10,322	9752	10,298	10,350	9507
California	131,301	124,140	109,464	102,899	108,102	116,083	115,418
Colorado	10,585	10,475	9525	7972	7937	8105	6726
Connecticut	10,364	9566	8783	9889	9167	8134	9987
Delaware	3621	3931	4168	4272	4046	4484	3817
District of Columbia	17,420	14,096	15,018	16,308	15,257	15,987	16,816
Florida	65,440	60,361	62,706	53,380	51,212	57,647	69,714
Georgia	47,358	51,097	51,652	46,734	42,847	44,723	41,668
Hawaii	3267	3075	2759	2228	1887	1682	1208
Idaho	1734	1802	1524	1285	1269	987	867
Illinois	46,907	44,610	40,607	38,700	35,160	32,563	35,978
Indiana	17,413	15,630	16,060	15,454	14,544	13,187	12,624
Iowa	5093	5156	4850	4574	4603	4411	3996
Kansas	8226	7471	7661	7003	6529	6376	6140
Kentucky	11,841	10,336	11,027	8852	8999	8734	7823
Louisiana	22,584	23,420	24,932	23,483	24,571	20,670	16,862
Maine	1460	1308	1165	1119	1031	1132	844
Maryland	26,984	29,104	32,269	30,039	28,342	31,069	28,365
Massachusetts	10,795	10,331	10,386	9937	9977	9462	9816
Michigan	34,951	32,524	32,848	34,065	35,406	34,627	37,776
Minnesota	7930	6801	6415	5885	6080	6307	5403
Mississippi	15,469	16,024	14,430	12,359	13,046	15,299	15,347
Missouri	22,025	22,260	20,628	20,718	20,069	20,438	18,720
Montana	1469	1443	1321	1216	1026	797	667
Nebraska	3720	3520	2653	2765	3018	3564	2797
Nevada	7084	6719	5418	4387	4202	4440	3617
New Hampshire	888	887	747	728	723	574	592
New Jersey	20,514	22,585	22,298	21,794	20,099	19,594	19,381
New Mexico	4562	4508	4373	3524	3329	3112	2553
New York	65,369	70,548	68,811	65,592	67,303	80,981	95,567
North Carolina	38,251	37,294	39,687	35,910	34,391	36,320	35,670
North Dakota	680	579	558	438	387	287	304
Ohio	43,197	42,651	35,967	33,646	32,275	33,108	30,507
Oklahoma	12,723	14,289	14,529	14,284	12,551	12,470	12,099
Oregon	11,159	9189	7791	6670	6633	6404	5480
Pennsylvania	27,596	27,742	29,622	29,250	30,782	29,979	27,478
Rhode Island	1620	1548	1580	1357	1628	1843	2140
South Carolina	23,525	23,899	24,018	21,485	21,522	21,187	18,997
South Dakota	1361	1281	1122	1036	999	790	783
Tennessee	29,666	31,600	32,444	30,896	30,749	32,110	26,864
Texas	80,297	81,822	81,580	76,824	65,814	66,701	63,386
Utah	1962	1934	1584	1363	1278	1349	1124
Vermont	533	431	417	443	380	334	265
Virginia	23,247	22,108	21,103	21,122	20,194	19,121	18,742
Washington	14,216	13,204	11,381	9895	9159	10,073	9848
West-Virginia	3344	3306	2610	2434	2480	2436	2100
Wisconsin	14,382	13,347	11,942	11,410	12,839	12,954	12,081
Wyoming	1096	1021	959	739	750	641	551

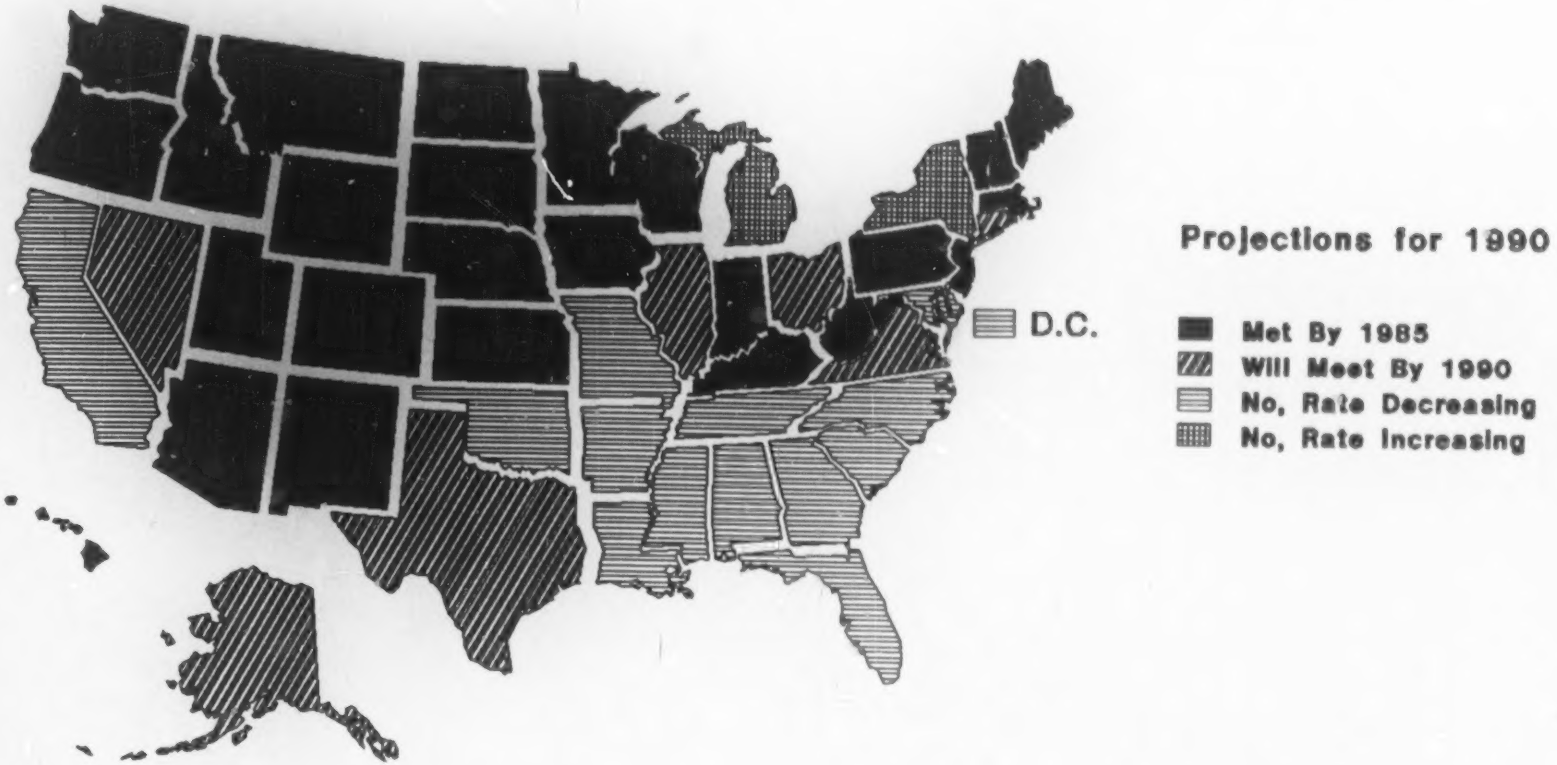
Source: Centers for Disease Control

TABLE 36 - Incidence of Gonorrhea Cases Per 100,000 Population

	1980	1981	1982	1983	1984	1985	1986	Annual Average Percentage Change	Is Objective Projected To Be Met?
United States	443.19	432.91	414.45	384.76	371.49	381.76	373.68	-2.80%	No
Alabama	616.85	623.17	621.12	570.79	574.60	576.28	511.94	-3.06%	No
Alaska	1013.93	974.94	773.32	655.69	580.79	608.81	498.31	-11.17%	Yes
Arizona	389.07	409.98	309.63	286.43	253.66	273.38	254.53	-6.83%	Met
Arkansas	443.09	427.04	447.23	419.26	438.77	438.56	400.80	-1.66%	No
California	554.76	511.60	441.69	406.59	419.33	440.41	427.78	-4.24%	No
Colorado	366.26	351.04	310.06	253.24	248.81	250.62	205.88	-9.15%	Met
Connecticut	333.46	306.31	280.88	314.94	290.74	256.51	313.17	-1.04%	Yes
Delaware	609.60	658.46	694.67	704.95	658.96	720.90	603.00	-.18%	No
District of Columbia	2730.41	2226.86	2395.22	2613.46	2445.03	2566.13	2686.26	-.27%	No
Florida	671.45	592.18	598.80	496.42	463.62	507.28	597.12	-1.94%	No
Georgia	866.89	917.36	913.55	814.75	733.18	748.50	682.63	-3.90%	No
Hawaii	338.55	313.78	276.45	218.65	182.14	160.04	113.75	-16.62%	Met
Idaho	183.69	186.93	155.83	130.06	126.90	98.31	86.53	-11.79%	Met
Illinois	410.49	388.79	353.75	336.76	305.10	282.25	311.44	-4.50%	Yes
Indiana	317.18	284.70	292.80	282.21	264.77	239.76	229.36	-5.26%	Met
Iowa	174.78	176.70	166.78	157.45	158.51	153.11	140.16	-3.61%	Met
Kansas	347.97	312.72	317.88	288.43	267.36	260.35	249.59	-5.39%	Met
Kentucky	323.44	281.25	298.43	238.28	241.65	234.22	209.79	-6.96%	Met
Louisiana	536.95	544.65	568.83	528.66	550.67	460.77	374.63	-5.82%	No
Maine	129.78	115.24	102.28	97.56	89.03	97.17	71.95	-9.36%	Met
Maryland	639.89	683.83	755.36	698.74	651.84	707.24	635.56	-.11%	No
Massachusetts	188.16	179.58	180.81	172.46	172.25	162.61	168.31	-1.84%	Met
Michigan	377.36	353.10	360.21	376.16	390.71	381.02	413.08	1.52%	No
Minnesota	194.55	165.39	155.21	141.94	146.01	150.45	128.22	-6.71%	Met
Mississippi	613.61	629.63	562.13	478.47	501.96	585.27	584.65	-.80%	No
Missouri	447.94	450.70	417.32	417.28	400.98	405.92	369.52	-3.16%	No
Montana	186.66	181.28	164.10	149.02	124.51	96.61	81.44	-12.91%	Met
Nebraska	236.94	222.36	166.86	173.14	188.04	222.06	175.03	-4.92%	Met
Nevada	885.50	794.21	617.08	489.07	458.23	473.85	375.60	-13.32%	Yes
New Hampshire	94.42	94.66	78.80	75.91	73.93	57.46	57.64	-8.22%	Met
New Jersey	278.53	304.96	300.23	291.99	267.59	259.15	254.38	-1.50%	Met
New Mexico	350.12	337.68	319.43	251.36	233.29	214.47	172.62	-11.12%	Met
New York	372.30	401.82	391.66	371.42	379.96	456.33	537.74	6.32%	No
North Carolina	650.31	625.95	659.36	590.53	557.39	580.01	563.24	-2.37%	No
North Dakota	104.13	87.59	83.04	64.32	56.33	41.90	44.77	-13.12%	Met
Ohio	400.05	394.88	333.74	313.22	300.40	308.07	283.73	-5.56%	Yes
Oklahoma	420.60	460.34	450.37	431.54	379.18	377.19	366.08	-2.29%	No
Oregon	423.81	345.06	292.02	250.94	247.87	238.42	203.11	-11.54%	Met
Pennsylvania	232.60	233.56	249.30	245.92	258.89	252.71	231.14	-.11%	Met
Rhode Island	171.07	162.61	165.79	142.09	169.58	190.59	219.49	4.24%	Met
South Carolina	753.52	750.13	745.90	660.47	652.97	635.29	562.54	-4.75%	No
South Dakota	196.96	185.12	161.44	148.21	141.70	111.58	110.59	-9.17%	Met
Tennessee	646.18	681.18	695.33	658.62	650.22	673.59	559.32	-2.38%	No
Texas	564.32	554.12	530.57	485.67	409.21	406.99	379.90	-6.38%	Yes
Utah	134.29	127.57	101.60	85.40	78.69	82.01	67.51	-10.83%	Met
Vermont	104.31	83.53	80.19	84.22	71.70	62.43	48.98	-11.84%	Met
Virginia	434.77	406.17	384.39	379.96	358.30	335.34	323.86	-4.79%	Yes
Washington	344.05	311.64	265.97	229.90	210.55	228.52	220.71	-7.13%	Met
West Virginia	171.49	168.59	133.03	123.93	127.05	125.76	109.49	-7.21%	Met
Wisconsin	305.61	281.82	251.57	240.26	269.50	271.23	252.48	-3.13%	Met
Wyoming	233.19	206.68	188.04	143.22	146.20	125.69	108.68	-11.95%	Met

Source: Number of Gonorrhea Cases -- Centers for Disease Control
State Population Estimates -- Census Bureau

FIGURE 14.
WILL STATES MEET OBJECTIVE FOR GONORRHEA?


D.C.
Projections for 1990
Met By 1985
Will Meet By 1990
No, Rate Decreasing
No, Rate Increasing

Primary and Secondary Syphilis

> **OBJECTIVE: By 1990, the reported incidence of primary and secondary syphilis incidence should be reduced to a rate of 7 cases per 100,000 population per year.**

National Progress

Attainment of this objective is uncertain. The *Midcourse Review* estimates that this objective might be met if the decline in the primary and secondary syphilis incidence rate continues at the same pace as it did in 1983 and 1984. Yet, in the first ten months of 1987, a 32 percent increase in the number of cases was reported over the first ten months of 1986. The estimated incidence rate for 1987 is 14.7 cases per 100,000, which represents the highest rate since 1950.[76]

State Progress

By 1986, 33 states had already met this objective and two additional states are projected to meet it by 1990. Over one-half of the states unlikely to meet the objective have primary and secondary syphilis incidence rates that have been increasing since 1980. Between 1985 and 1986, 18 states had increased incidence rates of primary and secondary syphilis.

Several states demonstrated considerable improvement from 1980 to 1985 in their incidence of primary and secondary syphilis, even though they are not expected to meet the 1990 objective. The District of Columbia, Georgia, and Louisiana have incidence rates which decreased at an annual average rate at least five times the national annual average of .62 percent.

Discussion

The recent increase in the incidence of primary and secondary syphilis appears to be largely concentrated among heterosexuals. Two concerns arise from this increase. It is likely to be followed by increased infant morbidity and mortality from congenital syphilis, and it may be an indication of a higher incidence of high-risk sexual activity, despite the fears of HIV infection and AIDS. This may result in an increase in the occurrence in HIV infections in the near future, since a history of sexually transmitted disease is associated with an increased risk for HIV infection and AIDS.[77]

A possible explanation for this increase in the incidence of primary and secondary syphilis is the routine use of spectinomycin to treat gonorrhea infections. Historically, other drugs, such as penicillin, have been used to treat gonorrhea. Penicillin simultaneously eliminates any syphilis infection. Spectinomycin, however, does not eliminate all strains of syphilis. However, for several other areas with sizeable increases in reported cases, spectinomycin was not in common use before the increases began.[78]

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[76] *MMWR* (Vol. 37, No. 3), 1988.

[77] Ibid.

[78] Ibid.

TABLE 37 - Number of Primary and Secondary Syphilis Cases

	1980	1981	1982	1983	1984	1985	1986
United States	27,204	31,266	33,613	32,698	28,607	27,131	27,883
Alabama	478	612	835	815	673	652	517
Alaska	10	14	18	15	6	4	2
Arizona	243	193	206	172	238	318	256
Arkansas	217	159	216	185	206	318	252
California	4638	4674	5025	5183	4424	4326	5958
Colorado	190	246	250	153	188	185	134
Connecticut	135	146	152	175	191	215	161
Delaware	19	18	24	42	21	39	63
District of Columbia	493	649	462	397	330	342	301
Florida	2257	3036	4149	4179	3876	3679	4344
Georgia	1849	1929	1806	1597	1429	1399	1563
Hawaii	120	70	101	83	78	75	35
Idaho	17	20	26	10	23	8	15
Illinois	1365	1222	1054	812	677	576	532
Indiania	203	267	186	153	166	110	103
Iowa	31	38	35	20	19	18	10
Kansas	38	44	69	56	52	27	32
Kentucky	129	107	132	176	97	70	69
Louisiana	1426	1652	1855	1642	1227	1068	906
Maine	6	5	8	18	9	16	27
Maryland	398	607	494	517	502	482	454
Massachusetts	318	388	403	416	289	271	241
Michigan	399	394	311	289	275	257	198
Minnesota	125	162	153	204	90	41	27
Mississippi	673	590	629	563	720	707	583
Missouri	165	395	300	145	185	136	110
Montana	2	3	6	5	4	6	7
Nebraska	12	11	16	15	15	8	12
Nevada	93	134	88	109	104	64	85
New Hampshire	5	14	2	21	12	13	14
New Jersey	442	603	658	815	674	755	671
New Mexico	112	132	206	182	99	127	78
New York	2728	3036	3057	2878	2617	2530	2408
North Carolina	495	647	725	886	862	672	536
North Dakota	2	13	7	2	9	2	5
Ohio	379	319	334	432	238	146	143
Oklahoma	113	177	192	196	188	212	166
Oregon	109	123	111	144	117	112	126
Pennsylvania	573	735	718	595	520	513	819
Rhode Island	32	38	27	22	25	20	19
South Carolina	406	587	563	608	772	790	699
South Dakota	6	3	6	11	1	6	5
Tennessee	925	682	655	588	542	692	599
Texas	3828	5329	6339	6256	5142	4610	3967
Utah	18	30	24	23	18	13	21
Vermont	4	17	8	3	1	5	9
Virginia	584	687	647	560	420	300	326
Washington	262	167	172	196	159	115	194
West Virginia	19	31	35	24	18	23	14
Wisconsin	104	91	103	97	56	48	38
Wyoming	9	20	15	13	3	10	4

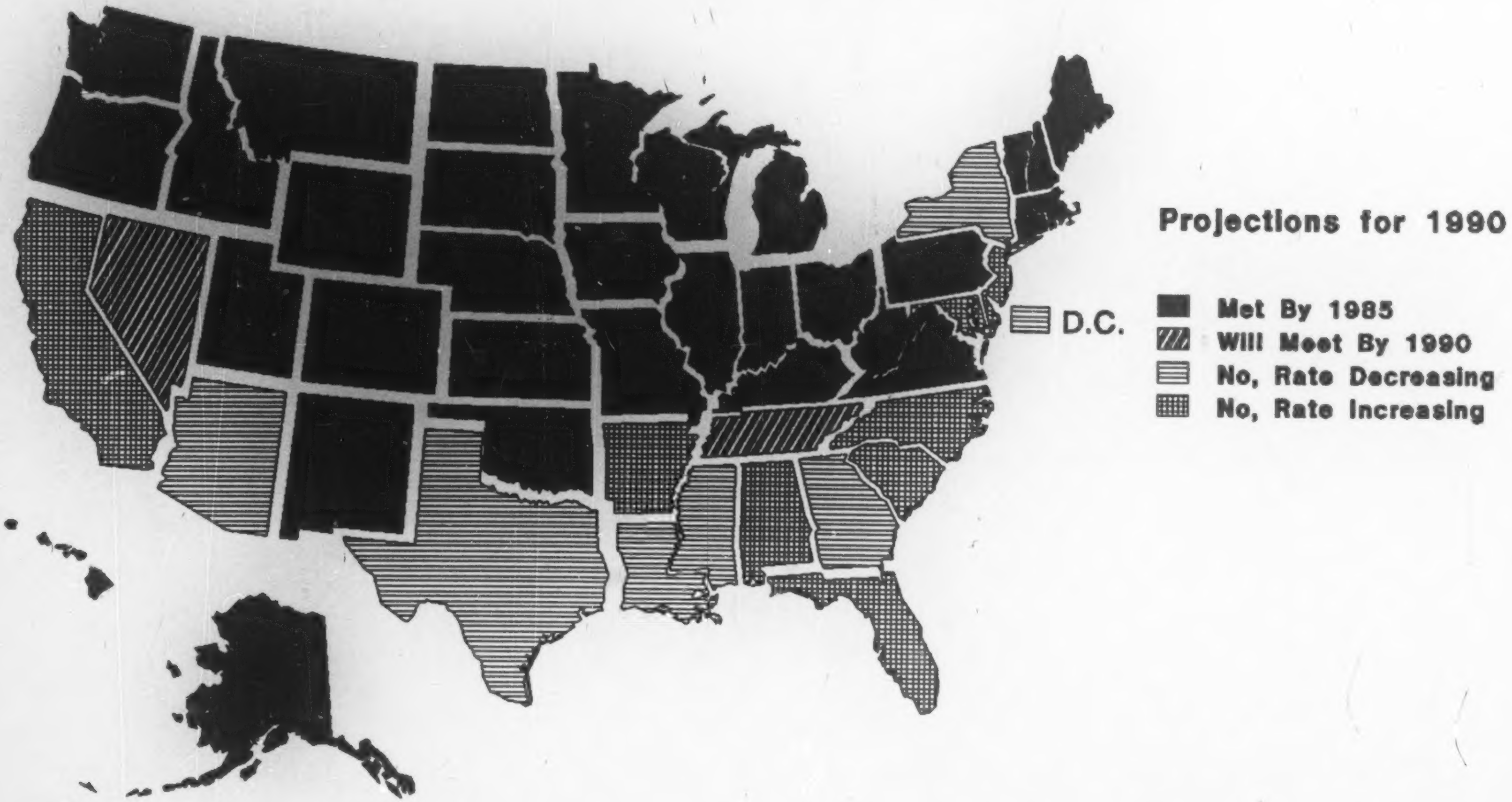
Source: Centers Disease Control
Symbol: dash (-) = Zero cases were reported

TABLE 38 - Incidence of Primary and Secondary Syphilis Cases Per 100,000 Population

	1980	1981	1982	1983	1984	1985	1986	Annual Average Percentage Change	Is Objective Projected To Be Met?
United States	12.01	13.63	14.50	13.97	12.10	11.36	11.57	-.62%	No
Alabama	12.28	15.58	21.17	20.56	16.86	16.21	12.76	.65%	No
Alaska	2.49	3.37	4.04	3.11	1.19	.77	.37	-27.06%	Met
Arizona	8.94	6.85	7.11	5.78	7.74	9.96	7.71	-2.43%	No
Arkansas	9.49	6.91	9.36	7.95	8.78	13.47	10.62	1.89%	No
California	19.60	19.26	20.28	20.48	17.16	16.41	22.08	2.01%	No
Colorado	6.57	8.24	8.14	4.86	5.89	5.72	4.10	-7.56%	Met
Connecticut	4.34	4.67	4.86	5.57	6.06	6.78	5.05	2.54%	Met
Delaware	3.20	3.02	4.00	6.93	3.42	6.27	9.95	20.83%	No
District of Columbia	77.27	102.53	73.68	63.62	52.88	54.90	48.08	-7.60%	No
Florida	23.16	29.79	39.62	38.86	35.09	32.37	37.21	8.22%	No
Georgia	33.85	34.63	31.94	27.84	24.45	23.41	25.61	-4.54%	No
Hawaii	12.44	7.14	10.12	8.15	7.53	7.14	3.30	-19.85%	Met
Idaho	1.80	2.07	2.66	1.01	2.30	.80	1.50	-3.03%	Met
Illinois	11.95	10.65	9.18	7.07	5.87	4.99	4.61	-14.69%	Met
Indiana	3.70	4.86	3.39	2.79	3.02	2.00	1.87	-10.73%	Met
Iowa	1.06	1.30	1.20	.69	.65	.62	.35	-16.88%	Met
Kansas	1.61	1.84	2.86	2.31	2.13	1.10	1.30	-3.47%	Met
Kentucky	3.52	2.91	3.57	4.74	2.60	1.88	1.85	-10.18%	Met
Louisiana	33.90	38.42	42.32	36.97	27.50	23.81	20.13	-8.32%	No
Maine	.53	.44	.70	1.57	.78	1.37	2.30	27.60%	Met
Maryland	9.44	14.26	11.56	12.03	11.55	10.97	10.17	1.26%	No
Massachusetts	5.54	6.74	7.02	7.22	4.99	4.66	4.13	-4.78%	Met
Michigan	4.31	4.28	3.41	3.19	3.03	2.83	2.17	-10.83%	Met
Minnesota	3.07	3.94	3.70	4.92	2.16	.98	.64	-22.97%	Met
Mississippi	26.70	23.18	24.50	21.80	27.70	27.05	22.21	-3.02%	No
Missouri	3.36	8.00	6.07	2.92	3.70	2.70	2.17	-7.00%	Met
Montana	.25	.38	.75	.61	.49	.73	.85	22.40%	Met
Nebraska	.76	.69	1.01	.94	.93	.50	.75	-.29%	Met
Nevada	11.63	15.84	10.02	12.15	11.34	6.83	8.83	-4.49%	Yes
New Hampshire	.54	1.49	.21	2.19	1.23	1.30	1.36	16.58%	Met
New Jersey	6.00	8.14	8.86	10.92	8.97	9.99	8.81	6.60%	No
New Mexico	8.60	9.89	15.05	12.98	6.94	8.75	5.27	-7.82%	Met
New York	15.54	17.29	17.40	16.30	14.77	14.26	13.55	-2.26%	No
North Carolina	8.42	10.86	12.05	14.57	13.97	10.73	8.46	.10%	No
North Dakota	.31	1.97	1.04	.29	1.31	.29	.74	15.74%	Met
Ohio	3.51	2.95	3.10	4.02	2.22	1.36	1.33	-14.93%	Met
Oklahoma	3.74	5.70	5.95	5.92	5.68	6.41	5.02	5.06%	Met
Oregon	4.14	4.62	4.16	5.42	4.37	4.17	4.67	2.03%	Met
Pennsylvania	4.83	6.19	6.04	5.00	4.37	4.32	6.89	6.10%	Met
Rhode Island	3.38	3.99	2.83	2.30	2.60	2.07	1.95	-8.77%	Met
South Carolina	13.00	18.42	17.48	18.69	23.42	23.69	20.70	8.05%	No
South Dakota	.87	.43	.86	1.57	.14	.85	.71	-3.39%	Met
Tennessee	20.15	14.70	14.04	12.53	11.46	14.52	12.47	-7.68%	Yes
Texas	26.90	36.09	41.23	39.55	31.97	28.13	23.78	-2.04%	No
Utah	1.23	1.98	1.54	1.44	1.11	.79	1.26	.39%	Met
Vermont	.78	3.29	1.54	.57	.19	.93	1.66	13.39%	Met
Virginia	10.92	12.62	11.79	10.07	7.45	5.26	5.63	-10.45%	Met
Washington	6.34	3.94	4.02	4.55	3.66	2.61	4.35	-6.10%	Met
West Virginia	.97	1.58	1.78	1.22	.92	1.19	.73	-4.70%	Met
Wisconsin	2.21	1.92	2.17	2.04	1.18	1.01	.79	-15.68%	Met
Wyoming	1.91	4.05	2.94	2.52	.58	1.96	.79	-13.74%	Met

Source: Cases of Syphilis -- Centers for Disease Control
State Population Estimates-- Census Bureau

FIGURE 15.
WILL STATES MEET OBJECTIVE FOR PRIMARY AND SECONDARY SYPHILIS?


D.C.
Projections for 1990
■ Met By 1985
▨ Will Meet By 1990
▤ No, Rate Decreasing
▦ No, Rate Increasing

ACCIDENT PREVENTION AND INJURY CONTROL

Introduction

Unintentional injuries cause substantial morbidity and mortality each year, as well as economic loss in terms of productivity and medical expenses. They are the fourth leading cause of death in the United States and the leading cause of years of potential life lost because they claim the lives of many young people. For persons ages one through 40, they are the leading cause of death. Among persons 75 years of age and older, the death rate from unintentional injuries is more than two and one-half times that of teenagers and young adults.[79]

Unintentional injuries also accounted for over 490 million days of restricted activity in 1981.[80] The economic consequences--medical expenses and indirect productivity losses--are conservatively estimated at $75 billion to $100 billion annually.[81]

Seventeen objectives make up this priority area. They address injury fatality rates, risk reduction, and professional and public education. This report examines state progress toward attaining five of the objectives which set fatality rates for injuries from motor vehicles, falls, drowning, and firearms.

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[79] *Midcourse Review*, p. 127.

[80] Ibid., p. 128.

[81] U.S. Department of Health and Human Services, Health - United States 1986 and Prevention Profile, (DHHS Publication No. (PHS) 87-1232) Washington, D.C.: U.S. Government Printing Office, 1986, p. 41.

Motor Vehicle Deaths

OBJECTIVE: By 1990, the motor vehicle fatality rate should be reduced to no greater than 18 per 100,000.

National Progress

According to the *Midcourse Review*, it is likely that this objective will be met. From 1980 to 1985, the motor vehicle fatality rate declined from 23.5 per 100,000 to 19.2 per 100,000, after having remained fairly constant from 1976 to 1980.[82]

State Progress

By 1990, 41 states are projected to meet this objective and in 1985, 17 states had already met it. Forty-nine states' fatality rates have declined since 1980. Only Alaska and the District of Columbia have motor vehicle fatality rates that have increased since 1980. Despite an increase, the District of Columbia's rate remains the lowest among all states, primarily because of its small number of roads with high speed limits.

Discussion

The decrease in motor vehicle fatalities is the result of such factors as: lower speed limits, improved motor vehicle design, safer road conditions, improved medical care for victims, and increased use of seat belts and child safety seats.[83] A 1987 law allowing states to raise speed limits from 55 to 65 miles per hour in certain areas may affect the motor vehicle fatality rate. However, a preliminary report from the National Highway Traffic Safety Administration indicates that in the first nine months of 1987, when the increased speed limits where going into effect, motor vehicle fatality rates where higher than for the same period in 1986, both in states that raised their speed limits and in states that did not. At this time, sufficient information is not available to determine a connection between the increase in fatalities and the increase in speed limits. The fatality rates may have been affected by other factors such as the increase in miles traveled on these roads over the same time period.[84]

Motor vehicle accidents kill more people and lead to more injuries than any other cause. One-half of all unintentional injury deaths are the result of motor vehicle accidents. Alcohol use and drunk driving continue to contribute significantly to motor vehicle fatalities.

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[82] *Midcourse Review*, p. 129.

[83] Ibid.

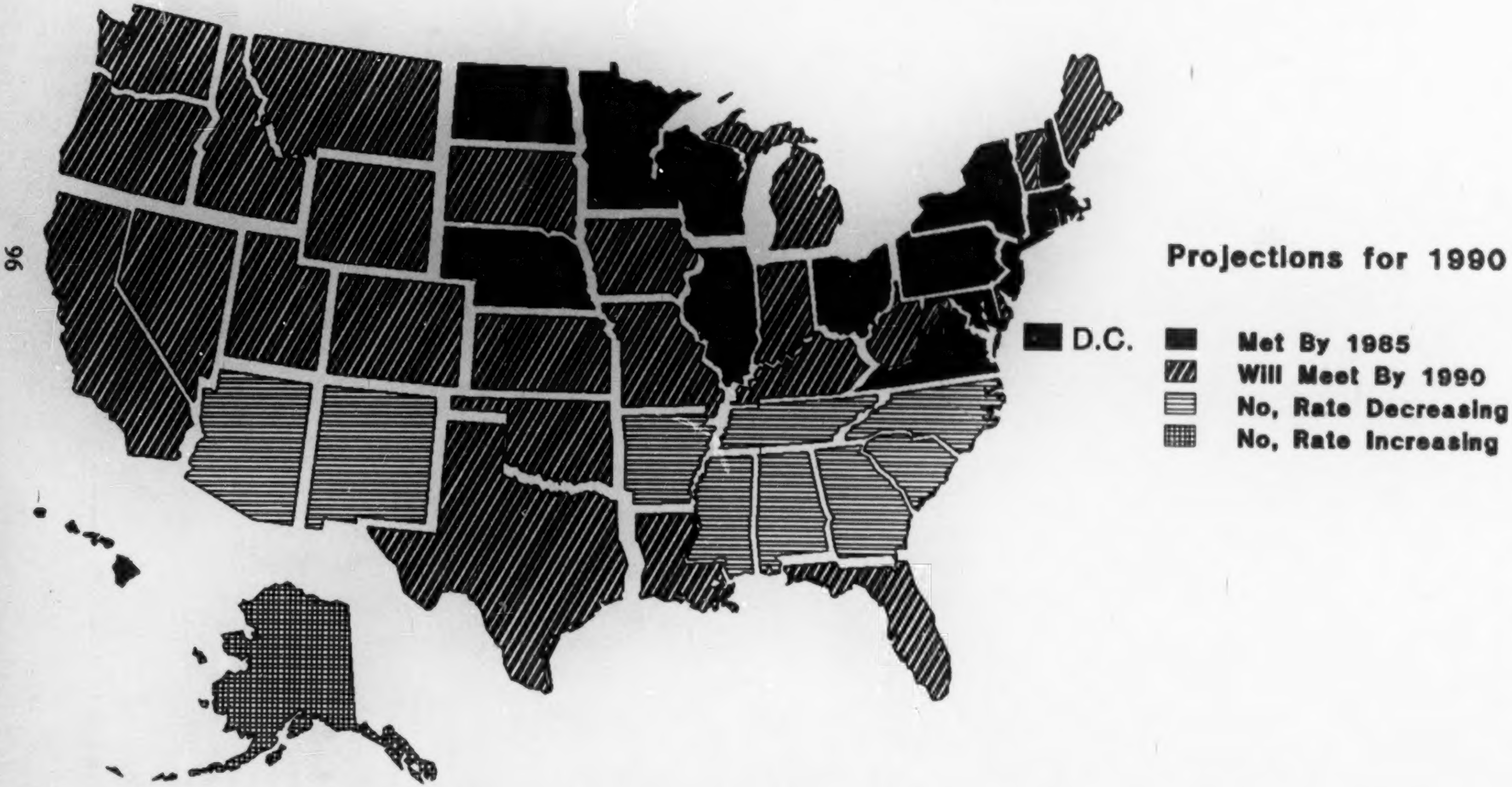
[84] U.S. Department of Transportation National Highway Traffic Safety Administration, Interim Report on the Safety Consequences of Raising the Speed Limit on Rural Interstate Highways. Washington, D.C.: U.S. Department of Transportation, May 1988.

TABLE 39 - Motor Vehicle Fatality Rate per 100,000 Population

	1980	1981	1982	1983	1984	1985	Annual Average Percentage Change	Is Objective Projected To Be Met?
United States	23.5	22.4	19.8	19.0	19.6	19.2	-3.96%	Yes
Alabama	27.5	28.1	24.9	26.1	25.9	25.2	-1.73%	No
Alaska	22.6	23.1	22.1	28.7	23.2	24.1	1.29%	No
Arizona	33.2	32.1	25.1	23.4	28.5	27.2	-3.91%	No
Arkansas	25.9	23.9	25.0	24.3	24.4	24.7	-.94%	No
California	24.8	22.8	20.2	19.3	20.6	20.1	-4.12%	Yes
Colorado	26.2	25.7	22.0	21.7	20.2	19.1	-6.13%	Yes
Connecticut	19.1	16.9	15.4	13.1	15.2	15.2	-4.47%	Met
Delaware	23.2	18.4	21.0	18.6	21.5	19.1	-3.81%	Yes
District of Columbia	8.1	10.7	7.7	12.2	13.4	9.0	2.13%	Met
Florida	29.5	29.7	25.1	24.4	24.8	24.7	-3.49%	Yes
Georgia	27.9	26.8	22.5	24.0	24.8	24.1	-2.89%	No
Hawaii	19.5	17.0	15.3	13.9	13.1	12.3	-8.80%	Met
Idaho	33.8	32.2	24.3	25.4	23.6	25.6	-5.41%	Yes
Illinois	18.8	17.7	15.2	14.7	15.0	15.2	-4.16%	Met
Indiana	21.9	22.6	18.6	19.3	18.1	19.4	-2.40%	Yes
Iowa	23.4	22.5	17.8	18.7	16.6	18.2	-4.90%	Yes
Kansas	27.2	25.5	22.5	18.8	23.0	21.1	-4.95%	Yes
Kentucky	23.4	23.7	23.6	22.0	20.3	19.6	-3.48%	Yes
Louisiana	29.6	28.6	25.1	22.1	21.6	22.1	-5.68%	Yes
Maine	22.5	19.2	16.8	20.3	20.2	18.1	-4.26%	Yes
Maryland	19.5	18.6	16.2	15.8	15.3	17.4	-2.25%	Met
Massachusetts	17.0	15.2	12.5	13.1	13.3	13.9	-3.95%	Met
Michigan	20.3	18.7	17.2	15.7	18.0	18.5	-1.84%	Yes
Minnesota	22.2	21.1	15.3	14.8	16.2	16.1	-6.22%	Met
Mississippi	29.5	31.3	29.5	27.7	27.1	26.3	-2.27%	No
Missouri	25.2	21.4	18.6	18.8	19.7	18.8	-5.69%	Yes
Montana	38.8	38.7	29.1	33.3	28.2	25.5	-8.05%	Yes
Nebraska	26.2	24.1	17.2	16.9	17.8	16.3	-9.06%	Met
Nevada	40.1	33.1	30.5	25.3	23.0	22.8	-10.68%	Yes
New Hampshire	19.8	16.2	19.0	20.1	19.3	17.6	-2.33%	Met
New Jersey	16.0	16.4	15.1	13.5	13.0	13.4	-3.48%	Met
New Mexico	42.4	32.7	39.8	35.0	32.8	34.7	-3.93%	No
New York	16.0	15.4	13.1	12.7	12.3	12.3	-5.12%	Met
North Carolina	26.8	25.8	22.7	21.1	24.1	24.2	-2.02%	No
North Dakota	26.8	28.9	23.5	18.6	17.8	15.0	-10.96%	Met
Ohio	19.3	17.2	15.4	15.1	15.6	15.4	-4.41%	Met
Oklahoma	33.6	33.8	34.1	27.2	26.8	23.4	-6.98%	Yes
Oregon	26.4	26.4	20.7	22.1	22.9	22.7	-2.97%	Yes
Pennsylvania	18.7	17.9	15.8	15.5	15.8	15.4	-3.81%	Met
Rhode Island	14.8	12.3	12.6	10.6	11.3	11.6	-4.76%	Met
South Carolina	27.7	26.8	23.3	26.4	28.6	27.7	.00%	No
South Dakota	36.3	28.8	24.1	25.6	22.4	20.8	-10.54%	Yes
Tennessee	25.8	24.5	23.6	22.9	24.5	23.9	-1.52%	No
Texas	30.0	30.8	27.4	24.5	24.9	23.2	-5.01%	Yes
Utah	24.2	23.6	20.8	18.6	19.0	20.8	-2.98%	Yes
Vermont	25.0	19.4	18.3	17.9	19.6	20.2	-4.17%	Yes
Virginia	20.2	19.4	16.0	16.6	17.9	17.5	-2.83%	Met
Washington	25.9	21.4	19.3	18.2	19.2	18.1	-6.92%	Yes
West Virginia	28.3	22.5	23.3	22.0	22.3	22.9	-4.15%	Yes
Wisconsin	20.7	20.0	16.7	16.0	18.0	16.2	-4.78%	Met
Wyoming	42.6	49.2	37.7	31.4	28.8	25.5	-9.75%	Yes

Source: National Center for Health Statistics

FIGURE 16.
WILL STATES MEET OBJECTIVE FOR MOTOR VEHICLE FATALITIES?


D.C.
Projections for 1990
Met By 1985
Will Meet By 1990
No, Rate Decreasing
No, Rate Increasing

OBJECTIVE: By 1990, the motor vehicle fatality rate for children under 15 should be reduced to no greater than 5.5 per 100,000 children.

National Progress

For children under 15 years of age, the motor vehicle mortality rate declined from 8.1 deaths per 100,000 in 1980 to 6.61 deaths in 1985. The *Midcourse Review* projects that the nation will meet this objective.

State Progress

By 1990, 27 states are projected to meet the objective, and in 1985, 18 states had already met it. The District of Columbia, even though meeting the objective in 1985, is unlikely to meet it in 1990, due to recent increases in its motor vehicle fatality rate for children under 15 years of age.

Since 1980, 38 states' motor vehicle fatality rates for children under 15 years of age have declined. Arizona, California, Idaho, and South Carolina, though unlikely to meet the objective, have mortality rates that have declined significantly since 1980. The annual average decline for these states was greater than that of the nation from 1980 through 1985.

Discussion

The increased use of safety seats and seat belts has contributed to the decline in mortality among children. Every state has passed child restraint use laws.[85] Nonetheless, for children over one year of age and under 14, motor vehicle accidents remain the leading cause of death.

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[85] Ibid., p. 130.

TABLE 40 - Motor Vehicle Fatality for Children 15 Years of Age and Under

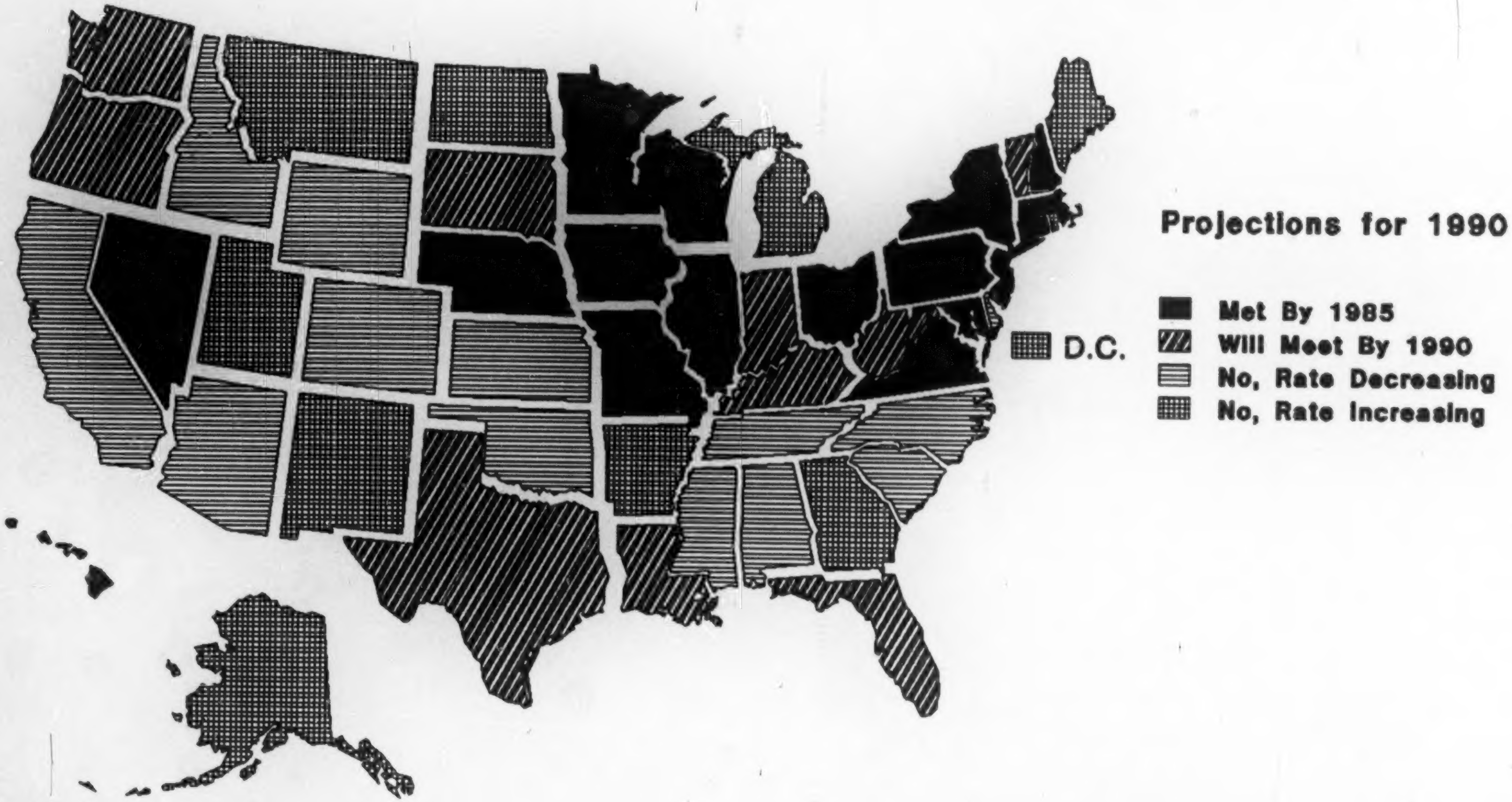
	1980	1981	1982	1983	1984	1985	Annual Average Percentage Change	Is Objective Projected To Be Met?
United States	8.10	7.42	6.96	6.68	6.49	6.61	-3.98%	Yes
Alabama	10.55	7.63	9.20	9.99	8.83	9.29	-2.52%	No
Alaska	5.56	9.91	3.39	11.72	1.47	6.99	4.71%	No
Arizona	11.78	9.88	8.93	8.02	9.66	9.00	-5.24%	No
Arkansas	9.23	11.34	8.61	8.63	8.82	9.74	1.09%	No
California	8.83	7.61	6.70	7.10	7.37	7.16	-4.10%	No
Colorado	7.33	6.11	6.10	7.51	6.05	6.56	-2.18%	No
Connecticut	5.26	4.12	4.85	4.41	2.31	3.47	-7.99%	Met
Delaware	9.09	8.53	4.69	5.47	8.53	7.69	-3.29%	No
District of Columbia	4.42	5.36	3.67	5.45	8.18	4.46	.18%	No*
Florida	12.36	10.74	10.06	7.73	7.87	9.44	-5.25%	Yes
Georgia	9.92	9.19	8.31	9.73	8.27	9.94	.05%	No
Hawaii	8.41	5.73	3.91	4.26	2.10	3.31	-17.03%	Met
Idaho	15.63	9.96	15.09	12.78	8.61	11.28	-6.31%	No
Illinois	6.55	5.93	6.05	4.64	5.28	5.16	-4.64%	Met
Indiana	8.95	7.61	6.69	6.37	4.18	6.76	-5.46%	Yes
Iowa	8.57	7.44	7.21	5.55	5.28	4.44	-12.31%	Met
Kansas	9.33	9.43	8.41	5.57	9.61	8.49	-1.88%	No
Kentucky	8.24	8.66	9.51	8.05	6.92	6.89	-3.52%	Yes
Louisiana	9.72	10.08	11.14	9.06	7.97	7.68	-4.61%	Yes
Maine	5.84	6.30	6.32	4.76	6.00	6.05	.72%	No
Maryland	5.21	5.84	5.13	4.83	4.48	5.25	.15%	Met
Massachusetts	3.84	4.38	3.58	3.63	3.30	5.45	7.27%	Met
Michigan	7.90	7.21	6.07	5.76	6.38	8.23	.82%	No
Minnesota	7.15	6.23	5.90	5.60	5.42	5.33	-5.72%	Met
Mississippi	12.12	9.55	10.42	10.68	9.61	10.49	-2.84%	No
Missouri	7.88	7.35	4.63	6.69	6.38	4.35	-11.20%	Met
Montana	9.63	11.11	6.81	9.28	7.18	9.74	.24%	No
Nebraska	6.35	6.37	6.35	6.91	7.18	4.16	-8.14%	Met
Nevada	17.34	8.70	7.81	5.64	6.12	5.13	-21.62%	Met
New Hampshire	6.25	5.83	8.74	6.34	6.34	5.31	-3.19%	Met
New Jersey	4.69	5.46	6.15	4.96	4.11	4.07	-2.83%	Met
New Mexico	13.86	9.86	13.92	12.89	9.64	14.71	1.20%	No
New York	5.63	5.48	5.02	4.66	4.18	3.75	-7.84%	Met
North Carolina	9.75	10.05	9.01	7.88	9.64	8.81	-2.00%	No
North Dakota	5.16	8.97	5.70	3.70	7.98	6.79	5.64%	No
Ohio	7.25	6.31	5.60	5.52	4.34	5.16	-6.60%	Met
Oklahoma	11.86	14.29	12.71	14.41	12.41	10.65	-2.14%	No
Oregon	3.71	4.36	4.93	4.81	3.64	3.42	-1.65%	Yes
Pennsylvania	5.76	5.82	4.82	4.56	5.38	4.77	-3.71%	Met
Rhode Island	4.66	3.70	4.81	4.35	2.73	6.01	5.21%	No
South Carolina	9.62	9.76	7.76	9.95	10.31	7.55	-4.72%	No
South Dakota	20.61	7.93	6.71	10.30	9.04	6.59	-20.40%	Yes
Tennessee	8.89	8.33	7.88	7.43	7.54	8.78	-.25%	No
Texas	10.77	8.98	8.84	8.51	8.64	7.35	-7.35%	Yes
Utah	8.01	6.31	6.72	7.44	5.65	9.53	3.55%	No
Vermont	11.11	6.96	6.96	4.39	5.22	10.53	-1.08%	Yes
Virginia	5.59	5.89	4.79	4.88	4.38	4.80	-3.02%	Met
Washington	8.66	6.79	7.18	5.70	6.87	6.82	-4.66%	Yes
West Virginia	8.77	6.65	5.83	5.66	3.92	7.58	-2.87%	Yes
Wisconsin	6.09	6.42	5.42	5.08	6.34	5.06	-3.64%	Met
Wyoming	10.74	8.53	15.04	12.41	8.15	9.77	-1.87%	No

Source: Number of Deaths -- Centers for Disease Control
State Population Estimates-- Census Bureau

* State had met the objective in 1985, yet based on its increasing rate, it will not meet the objective in 1990.

FIGURE 17.

WILL STATES MEET OBJECTIVE FOR MOTOR VEHICLE FATALITIES AMONG CHILDREN UNDER 15 YEARS OF AGE?


D.C.
Projections for 1990
Met By 1985
Will Meet By 1990
No, Rate Decreasing
No, Rate Increasing

Falls

OBJECTIVE: By 1990, the death rate from falls should be reduced to no more than 2 deaths per 100,000 population.

National Progress

According to the *Midcourse Review*, it is unlikely that this objective will be met. The death rate from falls declined from 5.87 deaths per 100,000 in 1980 to 5.03 deaths per 100,000 in 1985.

State Progress

While the majority of states show a decline in the fall fatality rate since 1980, no state has met the objective. By 1990, four states (Alaska, Delaware, Nevada, and Vermont) are likely to have no more than 2 deaths per 100,000 state population due to falls. Two states (Montana and North Dakota), although unlikely to meet the objective by 1990, have significantly reduced their fall fatalities at an annual average rate more than twice the national average decline of 3.05 percent. Since 1980, the death rate from falls has increased in five states (Arkansas, the District of Columbia, Idaho, New Hampshire, and Oregon).

Discussion

The majority of deaths caused by falls occurs among persons 75 years of age and older. An increase in the percentage of elderly among the total population has added to the challenge of decreasing the fall fatality rate to no more than 2 deaths per 100,000 by 1990.[86]

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[86] Ibid., p. 133.

TABLE 41 - Number of Deaths From Falls

	1980	1981	1982	1983	1984	1985
United States	13,294	12,628	12,077	12,024	11,937	12,001
Alabama	207	202	208	181	207	188
Alaska	18	14	9	15	20	13
Arizona	184	151	159	180	184	160
Arkansas	100	104	107	120	120	112
California	1180	1134	1027	1049	1159	1122
Colorado	181	175	182	159	165	193
Connecticut	180	189	181	170	146	163
Delaware	30	29	33	15	20	14
District of Columbia	57	61	68	52	43	57
Florida	521	547	497	540	535	555
Georgia	339	298	315	279	319	352
Hawaii	43	31	40	47	36	43
Idaho	53	50	49	54	41	58
Illinois	641	589	518	539	517	535
Indiana	314	315	338	295	272	286
Iowa	240	213	218	198	178	202
Kansas	146	156	127	144	160	128
Kentucky	251	258	221	202	181	190
Louisiana	171	203	173	166	147	157
Maine	81	55	67	51	48	62
Maryland	244	227	195	183	199	193
Massachusetts	462	375	394	409	409	395
Michigan	492	469	430	485	402	427
Minnesota	308	300	262	321	282	277
Mississippi	110	98	113	105	96	111
Missouri	351	390	337	340	336	322
Montana	66	66	52	62	53	47
Nebraska	130	138	122	107	111	106
Nevada	44	40	36	29	36	26
New Hampshire	45	68	44	43	49	57
New Jersey	444	418	408	357	377	353
New Mexico	72	59	67	65	97	60
New York	1089	995	1095	1128	1008	1073
North Carolina	315	263	266	284	262	275
North Dakota	56	43	42	33	48	32
Ohio	646	586	590	609	598	565
Oklahoma	207	214	212	154	161	173
Oregon	158	149	139	145	162	172
Pennsylvania	772	709	631	660	677	641
Rhode Island	72	69	69	57	47	61
South Carolina	149	132	127	126	136	136
South Dakota	44	37	49	53	54	45
Tennessee	251	225	200	242	232	208
Texas	642	687	619	606	623	653
Utah	89	91	86	79	91	84
Vermont	47	29	29	34	29	26
Virginia	363	316	283	248	286	295
Washington	258	264	254	205	210	224
West Virginia	136	120	110	99	95	104
Wisconsin	264	244	249	280	244	244
Wyoming	31	33	30	20	29	26

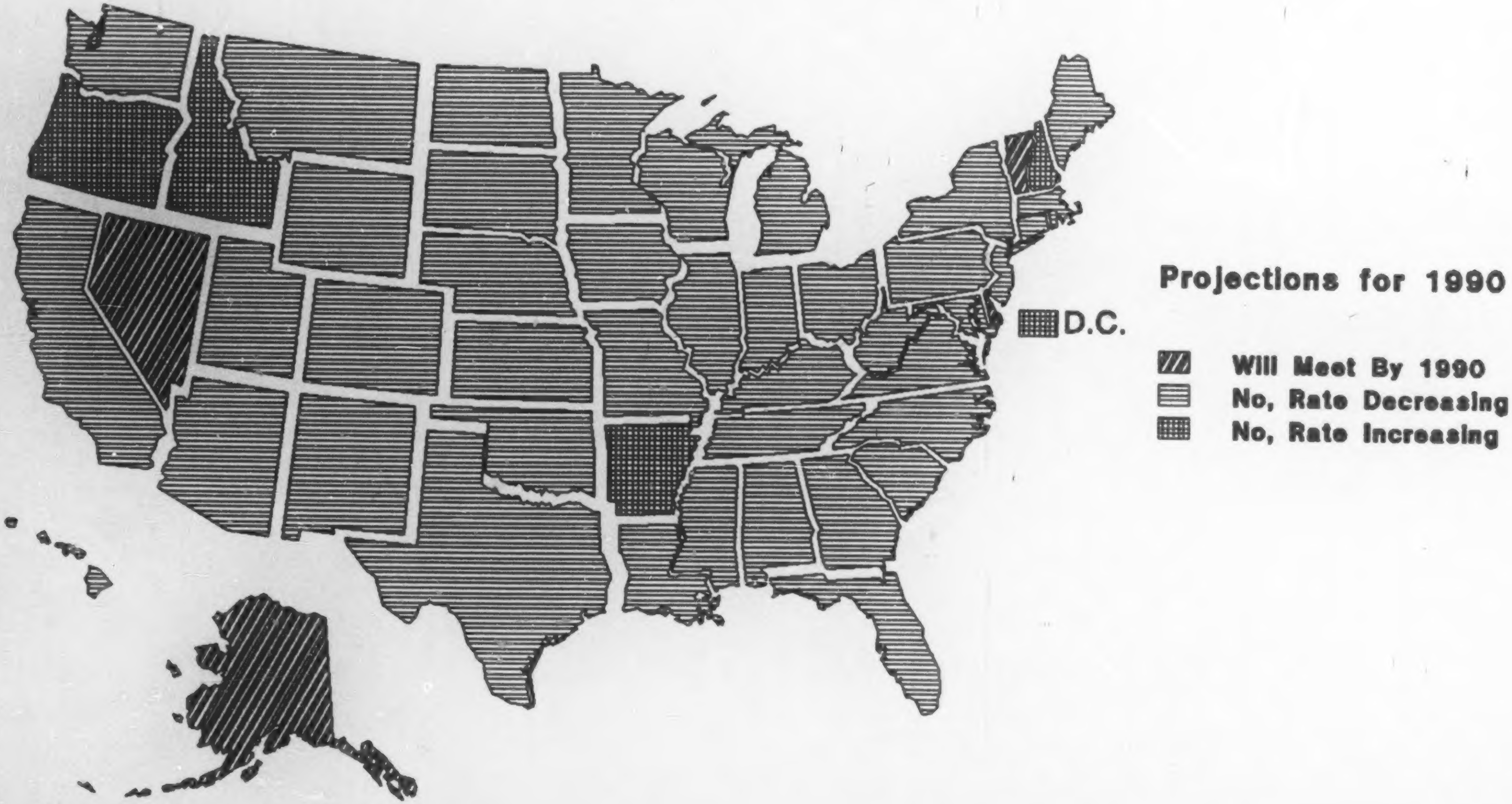
Source: National Center for Health Statistics

TABLE 42 - Falls Fatality Rate Per 100,000 Population

	1980	1981	1982	1983	1984	1985	Annual Average Percentage Change	Is Objective Projected To Be Met?
United States	5.87	5.51	5.21	5.14	5.05	5.03	-3.05%	No
Alabama	5.32	5.14	5.27	4.57	5.19	4.67	-2.54%	No
Alaska	4.48	3.37	2.02	3.11	3.96	2.49	-11.07%	Yes
Arizona	6.77	5.36	5.49	6.05	5.99	5.01	-5.84%	No
Arkansas	4.37	4.52	4.64	5.16	5.11	4.75	1.64%	No
California	4.99	4.67	4.14	4.14	4.50	4.26	-3.11%	No
Colorado	6.26	5.86	5.92	5.05	5.17	5.97	-.96%	No
Connecticut	5.79	6.05	5.79	5.41	4.63	5.14	-2.36%	No
Delaware	5.05	4.86	5.50	2.48	3.26	2.25	-14.93%	Yes
District of Columbia	8.93	9.64	10.85	8.33	6.89	9.15	.48%	No
Florida	5.35	5.37	4.75	5.02	4.84	4.88	-1.79%	No
Georgia	6.21	5.35	5.57	4.86	5.46	5.89	-1.03%	No
Hawaii	4.46	3.16	4.01	4.61	3.47	4.09	-1.69%	No
Idaho	5.61	5.19	5.01	5.47	4.10	5.78	.57%	No
Illinois	5.61	5.13	4.51	4.69	4.49	4.64	-3.74%	No
Indiana	5.72	5.74	6.16	5.39	4.95	5.20	-1.89%	No
Iowa	8.24	7.30	7.50	6.82	6.13	7.01	-3.17%	No
Kansas	6.18	6.53	5.27	5.93	6.55	5.23	-3.28%	No
Kentucky	6.86	7.02	5.98	5.44	4.86	5.10	-5.76%	No
Louisiana	4.07	4.72	3.95	3.74	3.29	3.50	-2.95%	No
Maine	7.20	4.85	5.88	4.45	4.15	5.32	-5.87%	No
Maryland	5.79	5.33	4.56	4.26	4.58	4.39	-5.36%	No
Massachusetts	8.05	6.52	6.86	7.10	7.06	6.79	-3.36%	No
Michigan	5.31	5.09	4.72	5.36	4.44	4.70	-2.42%	No
Minnesota	7.56	7.30	6.34	7.74	6.77	6.61	-2.65%	No
Mississippi	4.36	3.85	4.40	4.07	3.69	4.25	-.54%	No
Missouri	7.14	7.90	6.82	6.85	6.71	6.40	-2.17%	No
Montana	8.39	8.29	6.46	7.60	6.43	5.70	-7.44%	No
Nebraska	8.28	8.72	7.67	6.70	6.92	6.60	-4.42%	No
Nevada	5.50	4.73	4.10	3.23	3.93	2.77	-12.79%	Yes
New Hampshire	4.89	7.26	4.64	4.48	5.01	5.71	3.15%	No
New Jersey	6.03	5.64	5.49	4.78	5.02	4.67	-4.98%	No
New Mexico	5.53	4.42	4.89	4.64	6.80	4.14	-5.63%	No
New York	6.20	5.67	6.23	6.39	5.69	6.05	-.51%	No
North Carolina	5.36	4.41	4.42	4.67	4.25	4.39	-3.89%	No
North Dakota	8.58	6.51	6.25	4.85	6.99	4.67	-11.44%	No
Ohio	5.98	5.43	5.47	5.67	5.57	5.26	-2.55%	No
Oklahoma	6.84	6.89	6.57	4.65	4.86	5.23	-5.22%	No
Oregon	6.00	5.60	5.21	5.46	6.05	6.40	1.31%	No
Pennsylvania	6.51	5.97	5.31	5.55	5.69	5.40	-3.65%	No
Rhode Island	7.60	7.25	7.24	5.97	4.90	6.31	-3.66%	No
South Carolina	4.77	4.14	3.94	3.87	4.13	4.08	-3.10%	No
South Dakota	6.37	5.35	7.05	7.58	7.66	6.36	-.04%	No
Tennessee	5.47	4.85	4.29	5.16	4.91	4.36	-4.41%	No
Texas	4.51	4.65	4.03	3.83	3.87	3.98	-2.46%	No
Utah	6.09	6.00	5.52	4.95	5.60	5.11	-3.47%	No
Vermont	9.20	5.62	5.58	6.46	5.47	4.86	-11.98%	Yes
Virginia	6.79	5.81	5.15	4.46	5.07	5.17	-5.29%	No
Washington	6.24	6.23	5.94	4.76	4.83	5.08	-4.04%	No
West Virginia	6.97	6.12	5.61	5.04	4.87	5.37	-5.10%	No
Wisconsin	5.61	4.94	5.25	5.90	5.12	5.11	-1.85%	No
Wyoming	6.60	6.68	5.88	3.88	5.65	5.10	-5.02%	No

Source: Number of Deaths -- National Center for Health Statistics
State Population Estimates -- Census Bureau

FIGURE 18.
WILL STATES MEET OBJECTIVE FOR FALLS FATALITIES?


D.C.
Projections for 1990
Will Meet By 1990
No, Rate Decreasing
No, Rate Increasing

Drowning

OBJECTIVE: By 1990, the death rate from drowning should be reduced to no more than 1.5 per 100,000 persons.

National Progress

Given the decline in the drowning fatality rate from 1980 (2.67 per 100,000) to 1985 (1.85 per 100,000), the *Midcourse Review* projects this objective will be met.

State Progress

It is projected that 40 states will meet this objective by 1990. As of 1985, 19 states had already met it. The drowning mortality rates in all states, with the exception of Delaware, New Hampshire, and Vermont, have decreased since 1980. Although three states (Alaska, Mississippi, and Wyoming) are unlikely to meet the objective by 1990, their drowning mortality rates have declined more than the national 7.1 percent annual average decline.

Discussion

Although the drowning fatality rate decreased from 1980 to 1985, the increasing number of private swimming pools and recreational water use increased the exposure of the population to possible drowning. Seventeen percent of drownings involve boating accidents and approximately 10 percent occur in and around the home.[87] Another factor related to drowning is alcohol consumption which is associated with approximately 50 percent of adolescent and adult drownings.[88]

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[87] Ibid., p. 134.

[88] Ibid., p. 134.

TABLE 43 - Number of Deaths by Drowning

	1980	1981	1982	1983	1984	1985
United States	6043	5233	5258	5254	4444	4407
Alabama	152	117	103	115	93	91
Alaska	49	45	42	49	58	36
Arizona	93	123	99	90	78	92
Arkansas	83	60	82	63	66	82
California	702	673	633	650	594	512
Colorado	57	40	57	55	38	54
Connecticut	74	30	47	42	41	40
Delaware	8	11	9	16	9	13
District of Columbia	13	9	8	10	11	9
Florida	445	381	417	343	343	335
Georgia	202	156	165	139	120	134
Hawaii	35	37	39	37	30	30
Idaho	43	31	30	35	28	21
Illinois	242	214	174	190	156	140
Indiana	106	80	83	99	79	73
Iowa	45	41	39	39	28	35
Kansas	51	63	39	23	37	32
Kentucky	108	83	98	106	90	70
Louisiana	206	192	191	168	139	150
Maine	23	18	14	25	21	15
Maryland	94	82	86	64	56	70
Massachusetts	97	82	79	91	69	61
Michigan	204	179	161	170	127	132
Minnesota	64	61	78	60	56	55
Mississippi	120	90	93	90	83	84
Missouri	112	106	114	109	90	87
Montana	26	36	21	30	13	20
Nebraska	32	25	22	31	16	17
Nevada	29	31	36	26	19	29
New Hampshire	10	14	22	14	12	18
New Jersey	134	120	99	120	85	96
New Mexico	50	33	44	44	40	54
New York	277	242	255	240	236	232
North Carolina	225	140	139	170	146	130
North Dakota	11	20	18	8	11	6
Ohio	203	155	139	180	126	111
Oklahoma	105	79	120	95	84	82
Oregon	80	82	71	77	63	58
Pennsylvania	166	142	151	159	143	129
Rhode Island	18	12	15	8	11	6
South Carolina	110	97	100	104	75	66
South Dakota	20	10	23	6	17	13
Tennessee	153	110	118	115	89	95
Texas	507	463	487	524	388	460
Utah	41	34	33	55	31	27
Vermont	9	5	9	13	6	10
Virginia	163	103	113	123	83	83
Washington	104	124	108	111	96	102
West Virginia	51	58	47	41	29	36
Wisconsin	76	83	78	71	65	65
Wyoming	15	11	10	11	20	9

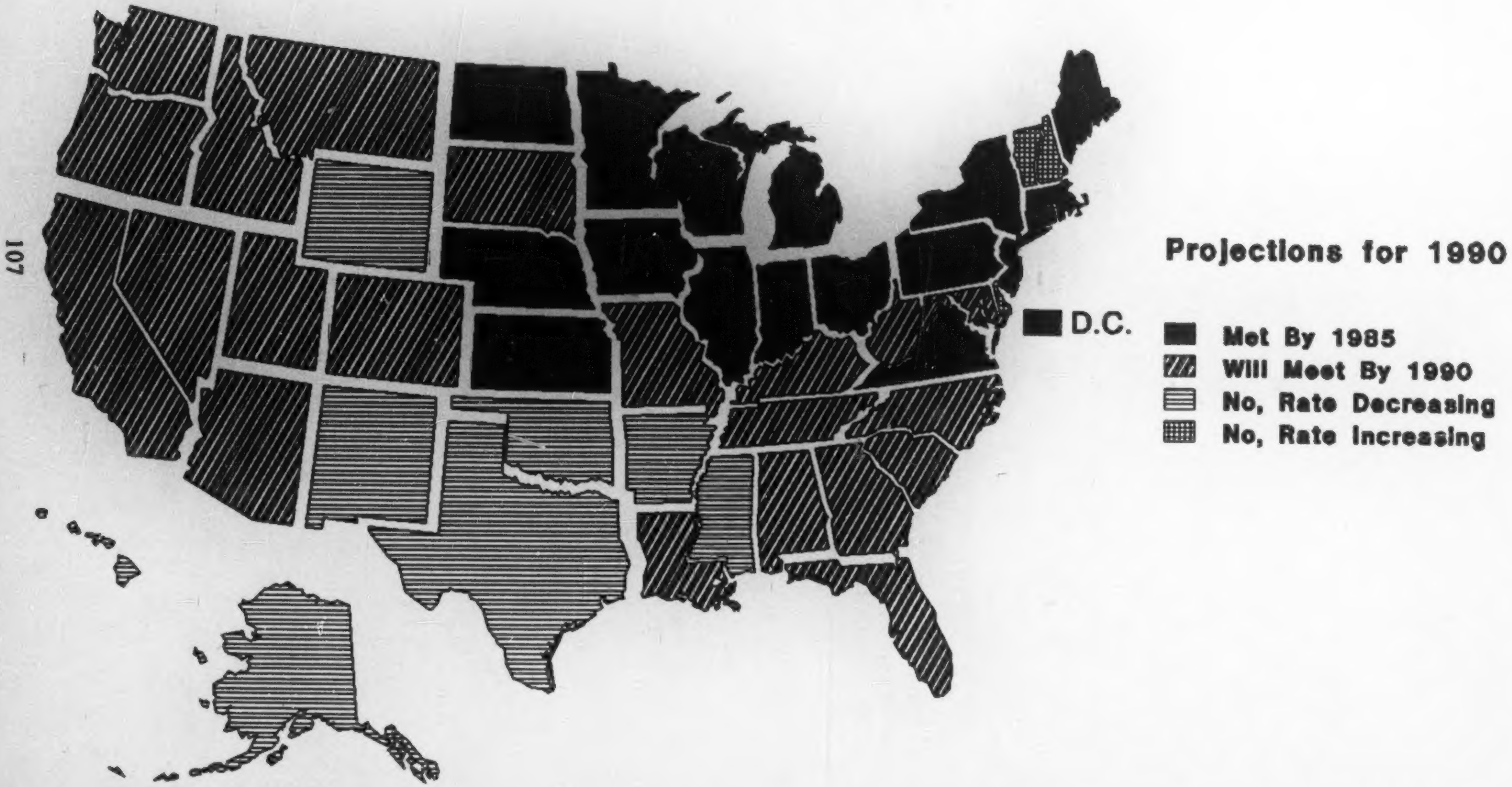
Source: National Center for Health Statistics

TABLE 44 - Drowning Fatality Rate per 100,000 Population

	1980	1981	1982	1983	1984	1985	Annual Average Percentage Change	Is Objective Projected To Be Met?
United States	2.67	2.28	2.27	2.25	1.88	1.85	-7.10%	No
Alabama	3.90	2.98	2.61	2.90	2.33	2.26	-10.33%	Yes
Alaska	12.19	10.84	9.42	10.14	11.49	6.90	-10.77%	No
Arizona	3.42	4.37	3.42	3.02	2.54	2.88	-3.38%	Yes
Arkansas	3.63	2.61	3.55	2.71	2.81	3.47	-.88%	No
California	2.97	2.77	2.55	2.57	2.30	1.94	-8.12%	Yes
Colorado	1.97	1.34	1.86	1.75	1.19	1.67	-3.28%	Yes
Connecticut	2.38	.96	1.50	1.34	1.30	1.26	-11.93%	Met
Delaware	1.35	1.84	1.50	2.64	1.47	2.09	9.19%	No
District of Columbia	2.04	1.42	1.28	1.60	1.76	1.44	-6.65%	Met
Florida	4.57	3.74	3.98	3.19	3.11	2.95	-8.38%	Yes
Georgia	3.70	2.80	2.92	2.42	2.05	2.24	-9.52%	Yes
Hawaii	3.63	3.78	3.91	3.63	2.90	2.85	-4.68%	No
Idaho	4.56	3.22	3.07	3.54	2.80	2.09	-14.41%	Yes
Illinois	2.12	1.87	1.52	1.65	1.35	1.21	-10.54%	Met
Indiana	1.93	1.46	1.51	1.81	1.44	1.33	-7.22%	Met
Iowa	1.54	1.41	1.34	1.34	.96	1.21	-4.69%	Met
Kansas	2.16	2.64	1.62	.95	1.52	1.31	-9.54%	Met
Kentucky	2.95	2.26	2.65	2.85	2.42	1.88	-8.64%	Yes
Louisiana	4.90	4.47	4.36	3.78	3.12	3.34	-7.35%	Yes
Maine	2.04	1.59	1.23	2.18	1.81	1.29	-8.83%	Met
Maryland	2.23	1.93	2.01	1.49	1.29	1.59	-6.49%	Yes
Massachusetts	1.69	1.43	1.38	1.58	1.19	1.05	-9.12%	Met
Michigan	2.20	1.94	1.77	1.88	1.40	1.45	-7.99%	Met
Minnesota	1.57	1.48	1.89	1.45	1.34	1.31	-3.53%	Met
Mississippi	4.76	3.54	3.62	3.48	3.19	3.21	-7.56%	No
Missouri	2.28	2.15	2.31	2.20	1.80	1.73	-5.38%	Yes
Montana	3.30	4.52	2.61	3.68	1.58	2.42	-6.00%	Yes
Nebraska	2.04	1.58	1.38	1.94	1.00	1.06	-12.27%	Met
Nevada	3.63	3.66	4.10	2.90	2.07	3.09	-3.11%	Yes
New Hampshire	1.09	1.49	2.32	1.46	1.23	1.80	10.66%	No
New Jersey	1.82	1.62	1.33	1.61	1.13	1.27	-6.94%	Met
New Mexico	3.84	2.47	3.21	3.14	2.80	3.72	-.61%	No
New York	1.58	1.38	1.45	1.36	1.33	1.31	-3.69%	Met
North Carolina	3.83	2.35	2.31	2.80	2.37	2.08	-11.51%	Yes
North Dakota	1.68	3.03	2.68	1.17	1.60	.88	-12.26%	Met
Ohio	1.88	1.44	1.29	1.68	1.17	1.03	-11.29%	Met
Oklahoma	3.47	2.55	3.72	2.87	2.54	2.48	-6.50%	No
Oregon	3.04	3.08	2.66	2.90	2.35	2.16	-6.60%	Yes
Pennsylvania	1.40	1.20	1.27	1.34	1.20	1.09	-4.92%	Met
Rhode Island	1.90	1.26	1.57	.84	1.15	.62	-20.06%	Met
South Carolina	3.52	3.04	3.11	3.20	2.28	1.98	-10.90%	Yes
South Dakota	2.89	1.45	3.31	.86	2.41	1.84	-8.70%	Yes
Tennessee	3.33	2.37	2.53	2.45	1.88	1.99	-9.77%	Yes
Texas	3.56	3.14	3.17	3.31	2.41	2.81	-4.66%	No
Utah	2.81	2.24	2.12	3.45	1.91	1.64	-10.17%	Yes
Vermont	1.76	.97	1.73	2.47	1.13	1.87	1.20%	No
Virginia	3.05	1.89	2.06	2.21	1.47	1.46	-13.74%	Met
Washington	2.52	2.93	2.52	2.58	2.21	2.31	-1.67%	Yes
West Virginia	2.62	2.96	2.40	2.09	1.49	1.86	-6.60%	Yes
Wisconsin	1.61	1.68	1.64	1.50	1.36	1.36	-3.36%	Met
Wyoming	3.19	2.23	1.96	2.13	3.90	1.76	-11.17%	No

Source: Number of Deaths -- National Center for Health Statistics
State Population Estimates -- Census Bureau

FIGURE 19.
WILL STATES MEET OBJECTIVE FOR DROWNING FATALITY RATE?


D.C.
Projections for 1990
Met By 1985
Will Meet By 1990
No, Rate Decreasing
No, Rate Increasing

Unintentional Deaths by Firearms

OBJECTIVE: By 1990, the unintentional deaths from firearms should be held to no more than 1,700.

National Progress

This objective was achieved in 1983 when 1,695 unintentional deaths involving firearms occurred. The number of deaths continued to decline in 1984 to 1,668, and in 1985 to 1,649.

State Progress

Due to the low number of unintentional deaths by firearms in individual states, incidence rates are erratic and state trends are difficult to assess. Thirty-three states had rates of decline above the national annual rate of decline of 4.36 percent. However, New York, North Dakota, and South Dakota showed a substantial rate of increase since 1980.

The highest unintentional fatality rate due to firearms in 1985 occurred in Alaska, at 7.47 per 100,000 population, followed by Mississippi, at 2.45 per 100,000 population, and South Dakota, at 2.12 per 100,000 population. In Delaware, the District of Columbia, and Rhode Island, no unintentional deaths due to firearms were reported for 1985. Sixteen states had more deaths in 1985 than in 1984, even though the number of deaths due to firearms decreased nationwide.

Discussion

Deaths from unintentional firearm injuries are significantly higher in rural areas and among certain ethnic populations. The fatalities are seven times higher in rural areas than in metropolitan areas.[89] Native Americans and Blacks are more likely to die unintentionally by firearms than are whites and Asian Americans.[90]

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[89] Ibid., p. 137.

[90] Ibid.

TABLE 45 - Number of Unintentional Deaths By Firearms

	1980	1981	1982	1983	1984	1985
United States	1955	1871	1756	1695	1668	1649
Alabama	83	77	73	65	65	62
Alaska	32	35	47	41	24	39
Arizona	28	19	17	13	24	23
Arkansas	26	22	23	32	21	25
California	189	148	102	124	147	176
Colorado	21	21	18	23	25	16
Connecticut	30	25	36	38	19	19
Delaware	5	3	1	4	2	0
District of Columbia	1	2	3	1	2	0
Florida	61	80	73	60	58	49
Georgia	82	84	60	57	54	61
Hawaii	5	3	4	4	0	4
Idaho	12	11	13	16	11	11
Illinois	47	46	24	43	33	37
Indiana	42	39	30	37	42	31
Iowa	15	17	14	10	20	9
Kansas	30	33	18	22	17	11
Kentucky	58	71	55	61	57	51
Louisiana	77	80	67	75	66	61
Maine	6	1	3	2	1	6
Maryland	18	7	13	4	14	4
Massachusetts	21	22	18	11	21	8
Michigan	54	53	34	33	44	34
Minnesota	18	22	16	14	12	20
Mississippi	89	73	72	97	68	64
Missouri	62	48	57	54	58	51
Montana	11	8	15	9	10	9
Nebraska	17	20	11	9	15	9
Nevada	14	11	14	8	2	5
New Hampshire	3	5	8	3	5	4
New Jersey	31	29	28	24	28	15
New Mexico	25	9	10	11	5	6
New York	47	49	77	62	87	124
North Carolina	54	44	46	31	40	41
North Dakota	3	6	5	8	8	7
Ohio	77	68	75	52	48	52
Oklahoma	25	36	45	46	36	34
Oregon	25	16	10	23	24	16
Pennsylvania	44	68	45	42	44	28
Rhode Island	2	2	1	1	0	0
South Carolina	61	41	40	42	42	36
South Dakota	7	11	7	7	4	15
Tennessee	71	76	58	79	41	68
Texas	212	235	250	201	218	221
Utah	6	9	6	5	10	7
Vermont	2	0	2	1	3	3
Virginia	39	27	51	32	35	29
Washington	17	16	20	20	21	19
West Virginia	17	15	12	[illegible]	11	9
Wisconsin	25	21	17	24	16	15
Wyoming	8	7	12	8	10	5

Source: National Center for Health Statistics

TABLE 46 - Unintentional Deaths by Firearms Per 100,000 Population

	1980	1981	1982	1983	1984	1985	Annual Average Percentage Change
United States	.86	.82	.76	.72	.71	.69	-4.36%
Alabama	2.13	1.96	1.85	1.64	1.63	1.54	-6.28%
Alaska	7.96	8.43	10.54	8.49	4.75	7.47	-1.26%
Arizona	1.03	.67	.59	.44	.78	.72	-6.91%
Arkansas	1.14	.96	1.00	1.38	.89	1.06	-1.41%
California	.80	.61	.41	.49	.57	.67	-3.51%
Colorado	.73	.70	.59	.73	.78	.49	-7.40%
Connecticut	.97	.80	1.15	1.21	.60	.60	-9.10%
Delaware	.84	.50	.17	.66	.33	.00	-100.00%
District of Columbia	.16	.32	.48	.16	.32	.00	-100.00%
Florida	.63	.78	.70	.56	.53	.43	-7.18%
Georgia	1.50	1.51	1.06	.99	.92	1.02	-7.42%
Hawaii	.52	.31	.40	.39	.00	.38	-5.98%
Idaho	1.27	1.14	1.33	1.62	1.10	1.10	-2.93%
Illinois	.41	.40	.21	.37	.29	.32	-4.85%
Indiana	.77	.71	.55	.68	.76	.56	-5.93%
Iowa	.51	.58	.48	.34	.69	.31	-9.51%
Kansas	1.27	1.38	.75	.91	.70	.45	-18.76%
Kentucky	1.58	1.93	1.49	1.64	1.53	1.37	-2.90%
Louisiana	1.83	1.86	1.53	1.69	1.48	1.36	-5.77%
Maine	.53	.09	.26	.17	.09	.52	-.70%
Maryland	.43	.16	.30	.09	.32	.09	-26.58%
Massachusetts	.37	.38	.31	.19	.36	.10	-17.79%
Michigan	.58	.58	.37	.36	.49	.37	-8.49%
Minnesota	.44	.54	.39	.34	.29	.48	1.56%
Mississippi	3.53	2.87	2.80	3.76	2.62	2.45	-7.06%
Missouri	1.26	.97	1.15	1.09	1.16	1.01	-4.29%
Montana	1.40	1.01	1.86	1.10	1.21	1.09	-4.84%
Nebraska	1.08	1.26	.69	.56	.93	.56	-12.33%
Nevada	1.75	1.30	1.59	.89	.22	.53	-21.14%
New Hampshire	.33	.53	.84	.31	.51	.40	4.21%
New Jersey	.42	.39	.38	.32	.37	.20	-13.97%
New Mexico	1.92	.67	.73	.78	.35	.41	-26.43%
New York	.27	.28	.44	.35	.49	.70	21.15%
North Carolina	.92	.74	.76	.51	.65	.65	-6.54%
North Dakota	.46	.91	.74	1.17	1.16	1.02	17.34%
Ohio	.71	.63	.70	.48	.45	.48	-7.46%
Oklahoma	.83	1.16	1.39	1.39	1.09	1.03	4.47%
Oregon	.95	.60	.37	.87	.90	.60	-8.90%
Pennsylvania	.37	.57	.38	.35	.37	.24	-8.64%
Rhode Island	.21	.21	.10	.10	.00	.00	-100.00%
South Carolina	1.95	1.29	1.24	1.29	1.27	1.08	-11.19%
South Dakota	1.01	1.59	1.01	1.00	.57	2.12	15.90%
Tennessee	1.55	1.64	1.24	1.68	.87	1.43	-1.60%
Texas	1.49	1.59	1.63	1.27	1.36	1.35	-1.98%
Utah	.41	.59	.38	.31	.62	.43	.71%
Vermont	.39	.00	.38	.19	.57	.56	7.46%
Virginia	.73	.50	.93	.58	.62	.51	-6.96%
Washington	.41	.38	.47	.46	.48	.43	.94%
West Virginia	.87	.76	.61	.31	.56	.46	-11.83%
Wisconsin	.53	.43	.36	.51	.34	.31	-9.98%
Wyoming	1.70	1.42	2.35	1.55	1.95	.98	-10.45%

Source: Number of Deaths -- National Center for Health Statistics
State Population Estimates -- Census Bureau

SURVEILLANCE AND CONTROL OF INFECTIOUS DISEASES

Introduction

Surveillance is one of the most important elements of disease control, and has historically provided the basis for understanding the major infectious diseases. It has allowed public health officials to aggressively work toward the eradication of many infectious diseases. Historically, infectious diseases were the leading causes of morbidity and mortality in men, women, and children. Substantial improvements in the control of infectious diseases through the development of vaccines and improvements in medical treatments have eliminated infectious diseases as the leading cause of death. Yet, with the emergence of new infectious diseases, such as the fatal acquired immunodeficiency syndrome, surveillance remains a critical element in controlling and ultimately eliminating infectious diseases.

Currently, infectious diseases are generally underestimated in national statistics. Improved surveillance systems will: allow for the detection of new sources of infections; assist in the identification of populations at risk; and improve the understanding of disease patterns and the evaluation of control measures.[91] In addition, surveillance systems will serve an increasingly important role in program evaluation and the identification of new areas for intervention.

This report examines two of the 13 objectives that comprise this priority area. These objectives are targeted toward reducing the prevalence of hepatitis B and tuberculosis.

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[91] Ibid., p. 163.

Hepatitis B

OBJECTIVE: By 1990, the annual estimated incidence of hepatitis B should be reduced to 20 per 100,000 population.

National Progress

According to the *Midcourse Review*, attainment of this objective does not seem likely. In 1985 the estimated incidence rate for hepatitis B was 69 cases per 100,000. In 1980, the reported incidence of hepatitis B was 8.39 cases per 100,000 population. Reported incidence rose to 11.15 cases per 100,000 population in 1985, and then declined slightly to 10.83 in 1986.[92] As of mid-December 1987, the reported number of cases was only slightly less than in 1986.

State Progress

Because of the underreporting of hepatitis B cases, projections of individual states' likelihood of meeting the objectives cannot be made reliably. In 41 states, reported cases of hepatitis B have increased since 1980. Nine states have shown considerable rate increases, more than four times the national annual percentage increase of 4.3. These states include Alaska (18.3 percent), Arizona (25.8), Idaho (33.5), Maine (32.1), Massachusetts (22.7), New Hampshire (20.5), New Mexico (29.8), Washington (23.7), and Wyoming (23.4).

Discussion

Decreases in reported and estimated cases of hepatitis B have not occurred partly because a safe and effective hepatitis B vaccine, introduced in 1981, has not been widely accepted in the U.S. Only a small percentage of individuals in high-risk groups have agreed to be vaccinated.[93] Results of a recent study of acceptance of the hepatitis B vaccine among health care workers showed a range of acceptance, from 27 percent to 58 percent.[94] It appeared that beliefs about vaccine safety and efficacy had the greatest effect on acceptance. Those most likely to accept the vaccine were individuals who thought the vaccine was safe and effective, and believed they were most susceptible to infection and vulnerable to serious illness or death following infection.[95]

The Centers for Disease Control is currently examining factors which may influence vaccine use among individuals perceived to be in high-risk groups. These factors include assessment of an individual's knowledge of the risk of disease, knowledge of methods of prevention, attitudes toward the use and acceptance of vaccines, and the degree to which vaccine cost limits vaccine use.[96] Programs to promote the vaccination of those at risk of hepatitis B infection should focus on forming or reforming beliefs about the safety and efficacy of the vaccine.

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[92] Ibid., p. 164.

[93] Ibid., pp. 164-165.

[94] American Journal of Public Health, "Acceptance of Hepatitis B Vaccine Among Hospital Workers." (Vol. 76, No. 3). March 1986, pp. 252-255.

[95] Ibid.

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[96] *Midcourse Review*, p. 165.

TABLE 47 - Number of Reported Hepatitis B Cases

	1980	1981	1982	1983	1984	1985	1986
United States	19,015	21,152	22,177	24,318	26,115	26,611	26,107
Alabama	467	288	381	424	464	487	576
Alaska	33	73	60	51	27	48	120
Arizona	184	191	269	365	486	719	890
Arkansas	159	99	116	127	99	99	128
California	3972	3876	3816	4402	5221	5969	5061
Colorado	234	220	197	227	278	272	264
Connecticut	382	516	569	438	415	358	459
Delaware	88	95	118	99	61	67	104
District of Columbia	103	110	134	137	154	154	89
Florida	1222	1512	1357	1398	1593	1728	1659
Georgia	797	816	820	823	935	841	815
Hawaii	119	95	87	73	74	135	77
Idaho	12	21	18	42	73	52	72
Illinois	575	711	690	724	606	445	500
Indiana	485	413	401	377	329	346	351
Iowa	105	94	94	90	108	92	94
Kansas	92	82	110	74	87	97	94
Kentucky	177	173	190	229	245	302	276
Louisiana	311	363	349	355	326	253	357
Maine	30	42	57	51	76	155	166
Maryland	597	759	764	827	694	709	840
Massachusetts	299	374	535	696	1016	1266	1035
Michigan	655	687	851	1009	1067	924	851
Minnesota	125	134	123	140	129	171	172
Mississippi	127	128	104	162	145	186	161
Missouri	205	307	297	365	297	359	420
Montana	21	25	15	21	25	61	52
Nebraska	60	75	87	57	65	72	65
Nevada	121	177	187	197	239	294	254
New Hampshire	34	43	43	42	100	61	116
New Jersey	934	1198	1094	1174	1052	814	630
New Mexico	53	77	52	94	120	309	287
New York	1087	1598	1922	2154	2341	914*	798*
North Carolina	376	347	381	426	512	601	608
North Dakota	6	5	7	17	16	22	16
Ohio	434	719	777	804	674	846	860
Oklahoma	226	256	358	351	206	256	218
Oregon	408	358	295	269	377	504	646
Pennsylvania	941	944	1006	1187	1088	1038	792
Rhode Island	72	87	114	102	143	167	124
South Carolina	492	446	466	508	628	654	694
South Dakota	8	8	17	17	26	30	19
Tennessee	467	518	589	697	716	681	677
Texas	819	823	1043	1234	1544	1513	1500
Utah	60	55	84	83	106	167	144
Vermont	25	28	20	43	31	22	48
Virginia	520	537	507	528	522	558	540
Washington	256	345	358	307	318	483	992
West Virginia	76	122	87	94	57	110	125
Wisconsin	153	166	149	185	190	175	252
Wyoming	5	16	12	22	14	25	19

Source: Centers for Disease Control

* Hepatitis cases reported to the New York City Department of Health are not included.

TABLE 48 - Incidence of Reported Hepatitis B Cases Per 100,000 Population

	1980	1981	1982	1983	1984	1985	1986	Annual Average Percentage Change
United States	8.39	9.22	9.57	10.39	11.04	11.15	10.83	4.34%
Alabama	11.99	7.33	9.66	10.70	11.62	12.11	14.22	2.87%
Alaska	8.21	17.59	13.45	10.56	5.35	9.20	22.47	18.27%
Arizona	6.77	6.78	9.28	12.26	15.82	22.52	26.82	25.79%
Arkansas	6.96	4.30	5.03	5.46	4.22	4.19	5.40	-4.14%
California	16.78	15.97	15.40	17.39	20.25	22.65	18.76	1.87%
Colorado	8.10	7.37	6.41	7.21	8.71	8.41	8.08	-.03%
Connecticut	12.29	16.52	18.20	13.95	13.16	11.29	14.39	2.67%
Delaware	14.81	15.91	19.67	16.34	9.93	10.77	16.43	1.74%
District of Columbia	16.14	17.38	21.37	21.96	24.68	24.72	14.22	-2.10%
Florida	12.54	14.83	12.96	13.00	14.42	15.21	14.21	2.11%
Georgia	14.59	14.65	14.50	14.35	16.00	14.08	13.35	-1.47%
Hawaii	12.33	9.69	8.72	7.16	7.14	12.84	7.25	-8.47%
Idaho	1.27	2.18	1.84	4.25	7.30	5.18	7.19	33.47%
Illinois	5.03	6.20	6.01	6.30	5.26	3.86	4.33	-2.48%
Indiana	8.83	7.52	7.31	6.88	5.99	6.29	6.38	-5.29%
Iowa	3.60	3.22	3.23	3.10	3.72	3.19	3.30	-1.47%
Kansas	3.89	3.43	4.56	3.05	3.56	3.96	3.82	-.30%
Kentucky	4.83	4.71	5.14	6.16	6.58	8.10	7.40	7.36%
Louisiana	7.39	8.44	7.96	7.99	7.31	5.64	7.93	1.18%
Maine	2.67	3.70	5.00	4.45	6.56	13.30	14.15	32.07%
Maryland	14.16	17.83	17.88	19.24	15.96	16.14	18.82	4.86%
Massachusetts	5.21	6.50	9.31	12.08	17.54	21.76	17.75	22.66%
Michigan	7.07	7.46	9.33	11.14	11.77	10.17	9.31	4.68%
Minnesota	3.07	3.26	2.98	3.38	3.10	4.08	4.08	4.88%
Mississippi	5.04	5.03	4.05	6.27	5.58	7.12	6.13	3.33%
Missouri	4.17	6.22	6.01	7.35	5.93	7.13	8.29	12.14%
Montana	2.67	3.14	1.86	2.57	3.03	7.39	6.35	15.54%
Nebraska	3.82	4.74	5.47	3.57	4.05	4.49	4.07	1.04%
Nevada	15.13	20.92	21.30	21.96	26.06	31.38	26.38	9.71%
New Hampshire	3.69	4.59	4.54	4.38	10.22	6.11	11.30	20.49%
New Jersey	12.68	16.18	14.73	15.73	14.01	10.77	8.27	-6.88%
New Mexico	4.07	5.77	3.80	6.70	8.41	21.30	19.41	29.75%
New York	6.19	9.10	10.94	12.20	13.22	5.15*	4.49*	
North Carolina	6.39	5.82	6.33	7.01	8.30	9.60	9.60	7.01%
North Dakota	.92	.76	1.04	2.50	2.33	3.21	2.36	17.00%
Ohio	4.02	6.66	7.21	7.48	6.27	7.87	8.00	12.15%
Oklahoma	7.47	8.25	11.10	10.60	6.22	7.74	6.60	-2.05%
Oregon	15.50	13.44	11.06	10.12	14.09	18.76	23.94	7.52%
Pennsylvania	7.93	7.95	8.47	9.98	9.15	8.75	6.66	-2.86%
Rhode Island	7.60	9.14	11.96	10.68	14.90	17.27	12.72	8.95%
South Carolina	15.76	14.00	14.47	15.62	19.05	19.61	20.55	4.52%
South Dakota	1.16	1.16	2.45	2.43	3.69	4.24	2.68	15.04%
Tennessee	10.17	11.17	12.62	14.86	15.14	14.29	14.10	5.59%
Texas	5.76	5.57	6.78	7.80	9.60	9.23	8.99	7.71%
Utah	4.11	3.63	5.39	5.20	6.53	10.15	8.65	13.22%
Vermont	4.89	5.43	3.85	8.17	5.85	4.11	8.87	10.43%
Virginia	9.73	9.87	9.23	9.50	9.26	9.79	9.33	-.69%
Washington	6.20	8.14	8.37	7.13	7.31	10.96	22.23	23.73%
West Virginia	3.90	6.22	4.43	4.79	2.92	5.68	6.52	8.95%
Wisconsin	3.25	3.36	3.14	3.90	3.99	3.66	5.27	8.37%
Wyoming	1.06	3.24	2.35	4.26	2.73	4.90	3.75	23.35%

Source: Number of Hepatitis B Cases -- Centers for Disease Control
State Population Estimates -- Census Bureau

* Hepatitis cases reported to the New York City Department of Health are not included.

Tuberculosis

OBJECTIVE: By 1990, the annual reported incidence of tuberculosis should be reduced to eight per 100,000 population.

National Progress

The *Midcourse Review* estimates that attainment of this objective is possible. In 1980, the reported incidence of tuberculosis was 12.2 per 100,000 population. This figure decreased to 9.4 per 100,000 population in 1986.

State Progress

By 1990, 41 states are projected to meet this objective. In 1986, 30 had already met it. In addition, Alaska and Florida, though not expected to meet the objective, have incidence rates that declined more than the national annual percentage of 4.24. Forty-five states have tuberculosis incidence rates that have been decreasing since 1980.

The tuberculosis rate increased in six states. Among these states, four (Arkansas, Hawaii, New York, and South Carolina) are unlikely to meet the objective.

Discussion

The rates of tuberculosis in the U.S. over the past three decades have been consistently higher among racial minorities than among whites. While the rates of tuberculosis have declined overall, the rate of decline has been much slower for nonwhites than for whites.[97] In 1985, more than three-fifths of all reported cases occurred among racial and ethnic minorities.[98]

There is concern about a leveling off of the downward trend in the incidence of tuberculosis in the United States. One reason may be that persons infected with the virus which causes acquired immunodeficiency syndrome (AIDS) are more susceptible to tuberculosis. Areas with the largest number of cases of tuberculosis in 1985 are also some of the areas that have reported the highest prevalence of AIDS cases. Another factor contributing to the leveling off of the tuberculosis decline is the increasing proportion of tuberculosis from younger people who emigrate from other parts of the world. It is estimated that up to 50 percent of all people in developing countries are infected with the disease.[99]

Strategies to combat tuberculosis need to focus on how to reach populations at greatest risk, such as nonwhites and recent immigrants, as well as the spread of tuberculosis in those infected with the AIDS virus. Presently, epidemiologists and tuberculosis program staff at CDC are working closely with health departments in cities with the largest number of AIDS cases to better define and understand the tuberculosis/AIDS connection and to design effective control strategies.[100]

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[97] *MMWR* (Vol. 36, No. 6), 1987.

[98] Ibid.

[99] American Review of Respiratory Disease, Supplement on Future Research in Tuberculosis, (Vol. 134). July - September 1986, pp. 401 -23.

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[100] *Midcourse Review*, p. 166.

TABLE 49 - Number of Tuberculosis Cases

	1980	1981	1982	1983	1984	1985	1986
United States	27,749	27,373	25,520	23,846	22,255	22,144	22,768
Alabama	663	640	631	522	565	531	588
Alaska	76	83	96	98	79	110	72
Arizona	342	342	300	264	273	271	261
Arkansas	369	381	412	414	315	362	425
California	4279	4520	3606	3469	3306	3526	3438
Colorado	135	122	113	108	96	106	87
Connecticut	173	171	155	194	176	164	175
Delaware	76	71	55	65	57	53	54
District of Columbia	341	239	228	202	189	157	169
Florida	1647	1553	1467	1457	1335	1425	1478
Georgia	849	928	830	808	784	828	846
Hawaii	127	197	252	236	218	189	179
Idaho	33	11	31	35	28	26	25
Illinois	1352	1528	1653	1380	1207	1193	1144
Indiana	429	374	399	411	383	336	307
Iowa	91	88	73	65	68	60	46
Kansas	108	120	92	76	77	82	72
Kentucky	570	596	605	523	510	463	464
Louisiana	577	534	471	439	377	388	429
Maine	58	52	57	39	35	47	38
Maryland	610	621	540	409	428	418	362
Massachusetts	452	504	503	389	376	449	428
Michigan	1168	931	864	790	661	537	615
Minnesota	237	188	157	165	138	132	155
Mississippi	458	401	333	414	380	355	383
Missouri	466	431	390	399	354	311	338
Montana	27	35	37	47	33	50	34
Nebraska	44	32	32	25	30	22	19
Nevada	44	45	67	52	42	39	42
New Hampshire	22	34	33	38	27	23	31
New Jersey	906	927	804	809	790	549	724
New Mexico	146	152	122	116	112	94	111
New York	2294	2223	2268	2309	2246	2570	2838
North Carolina	1066	981	806	780	756	654	722
North Dakota	54	31	16	9	14	12	10
Ohio	747	657	621	519	528	459	461
Oklahoma	333	381	335	331	262	259	267
Oregon	218	206	194	182	156	139	136
Pennsylvania	1015	1048	1080	972	836	771	703
Rhode Island	66	49	34	60	55	53	48
South Carolina	520	541	513	443	544	568	593
South Dakota	49	66	36	46	25	31	29
Tennessee	791	778	747	645	601	576	597
Texas	2075	2015	2045	1965	1762	1750	1890
Utah	61	64	51	46	40	31	42
Vermont	25	27	13	11	8	8	17
Virginia	654	670	672	520	473	488	415
Washington	424	401	301	239	207	220	218
West Virginia	203	181	162	133	133	109	124
Wisconsin	252	192	208	164	155	142	115
Wyoming	27	11	10	14	5	8	4

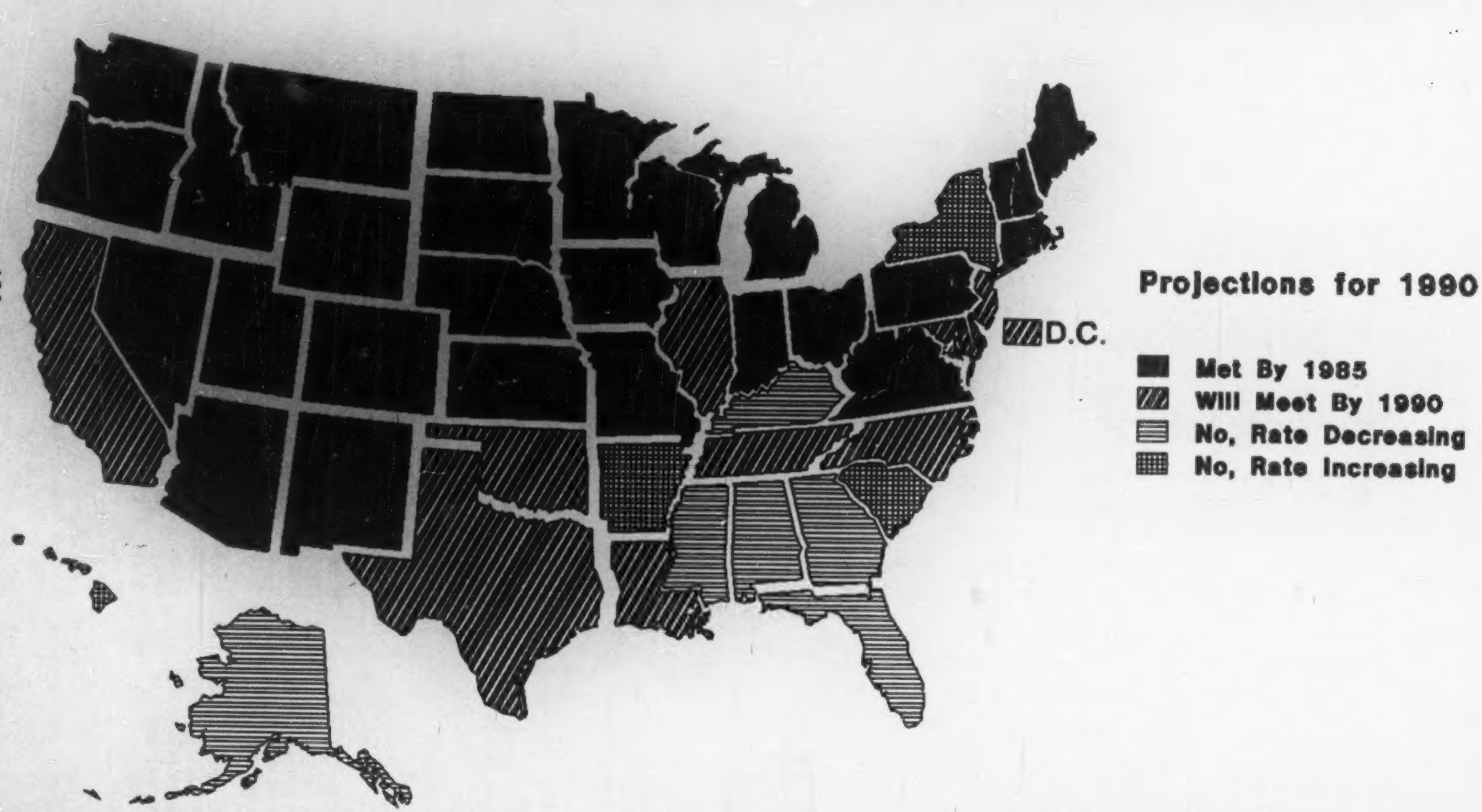
Source: Centers for Disease Control

TABLE 50 - Incidence of Tuberculosis Cases Per 100,000 Population

	1980	1981	1982	1983	1984	1985	1986	Annual Average Percentage Change	Is Objective Projected To Be Met?
United States	12.25	11.94	11.01	10.19	9.41	9.28	9.44	-4.24%	Yes
Alabama	17.03	16.29	16.00	13.17	14.15	13.20	14.51	-2.63%	No
Alaska	18.91	20.00	21.52	20.29	15.64	21.07	13.48	-5.48%	No
Arizona	12.58	12.14	10.35	8.87	8.88	8.49	7.86	-7.54%	Met
Arkansas	16.14	16.57	17.85	17.80	13.42	15.34	17.92	1.75%	No
California	18.08	18.63	14.55	13.71	12.82	13.38	12.74	-5.66%	Yes
Colorado	4.67	4.09	3.68	3.43	3.01	3.28	2.66	-8.94%	Met
Connecticut	5.57	5.48	4.96	6.18	5.58	5.17	5.49	-.24%	Met
Delaware	12.79	11.89	9.17	10.73	9.28	8.52	8.53	-6.53%	Yes
District of Columbia	53.45	37.76	36.36	32.37	30.29	25.20	27.00	-10.76%	Yes
Florida	16.90	15.24	14.01	13.55	12.09	12.54	12.66	-4.70%	No
Georgia	15.54	16.66	14.68	14.09	13.42	13.86	13.86	-1.89%	No
Hawaii	13.16	20.10	25.25	23.16	21.04	17.98	16.85	4.21%	No
Idaho	3.50	1.14	3.17	3.54	2.80	2.59	2.50	-5.47%	Met
Illinois	11.83	13.32	14.40	12.01	10.47	10.34	9.90	-2.92%	Yes
Indiana	7.81	6.81	7.27	7.51	6.97	6.11	5.58	-5.46%	Met
Iowa	3.12	3.02	2.51	2.24	2.34	2.08	1.61	-10.42%	Met
Kansas	4.57	5.02	3.82	3.13	3.15	3.35	2.93	-7.15%	Met
Kentucky	15.57	16.22	16.37	14.08	13.69	12.42	12.44	-3.67%	No
Louisiana	13.72	12.42	10.75	9.88	8.45	8.65	9.53	-5.89%	Yes
Maine	5.16	4.58	5.00	3.40	3.02	4.03	3.24	-7.45%	Met
Maryland	14.47	14.59	12.64	9.51	9.84	9.52	8.11	-9.19%	Yes
Massachusetts	7.88	8.76	8.76	6.75	6.49	7.72	7.34	-1.18%	Met
Michigan	12.61	10.11	9.47	8.72	7.29	5.91	6.72	-9.95%	Met
Minnesota	5.81	4.57	3.80	3.98	3.31	3.15	3.68	-7.35%	Met
Mississippi	18.17	15.76	12.97	16.03	14.62	13.58	14.59	-3.59%	No
Missouri	9.48	8.73	7.89	8.04	7.07	6.18	6.67	-5.68%	Met
Montana	3.43	4.40	4.60	5.76	4.00	6.06	4.15	3.23%	Met
Nebraska	2.80	2.02	2.01	1.57	1.87	1.37	1.19	-13.32%	Met
Nevada	5.50	5.32	7.63	5.80	4.58	4.16	4.36	-3.79%	Met
New Hampshire	2.39	3.63	3.48	3.96	2.76	2.30	3.02	3.98%	Met
New Jersey	12.30	12.52	10.83	10.84	10.52	7.26	9.50	-4.21%	Yes
New Mexico	11.20	11.39	8.91	8.27	7.85	6.48	7.51	-6.46%	Met
New York	13.07	12.66	12.91	13.07	12.68	14.48	15.97	3.40%	No
North Carolina	18.12	16.47	13.39	12.83	12.25	10.44	11.40	-7.43%	Yes
North Dakota	8.27	4.69	2.38	1.32	2.04	1.75	1.47	-24.99%	Met
Ohio	6.92	6.08	5.76	4.83	4.91	4.27	4.29	-7.66%	Met
Oklahoma	11.01	12.27	10.38	10.00	7.92	7.83	8.08	-5.03%	Yes
Oregon	8.28	7.74	7.27	6.85	5.83	5.17	5.04	-7.94%	Met
Pennsylvania	8.56	8.82	9.09	8.17	7.03	6.50	5.91	-5.97%	Met
Rhode Island	6.97	5.15	3.57	6.28	5.73	5.48	4.92	-5.63%	Met
South Carolina	16.66	16.98	15.93	13.62	16.50	17.03	17.56	.88%	No
South Dakota	7.09	9.54	5.18	6.58	3.55	4.38	4.10	-8.74%	Met
Tennessee	17.23	16.77	16.01	13.75	12.71	12.08	12.43	-5.30%	Yes
Texas	14.58	13.65	13.30	12.42	10.96	10.68	11.33	-4.12%	Yes
Utah	4.18	4.22	3.27	2.88	2.46	1.88	2.52	-8.06%	Met
Vermont	4.89	5.23	2.50	2.09	1.51	1.50	3.14	-7.11%	Met
Virginia	12.23	12.31	12.24	9.35	8.39	8.56	7.17	-8.51%	Met
Washington	10.26	9.46	7.03	5.55	4.76	4.99	4.89	-11.63%	Met
West Virginia	10.41	9.23	8.26	6.77	6.81	5.63	6.47	-7.63%	Met
Wisconsin	5.35	3.89	4.38	3.45	3.25	2.97	2.40	-12.50%	Met
Wyoming	5.74	2.23	1.96	2.71	.97	1.57	.79	-28.17%	Met

Source: State Population Estimates -- Census Bureau
Number of Tuberculosis Cases -- National Center for Health Statistics

FIGURE 20.
WILL STATES MEET OBJECTIVE FOR TUBERCULOSIS?


D.C.
Projections for 1990
Met By 1985
Will Meet By 1990
No, Rate Decreasing
No, Rate Increasing

SMOKING AND HEALTH

Introduction

Cigarette smoking has a significant effect on disease in the United States. It is linked to more cancers and cancer deaths than any other factor and is a prime risk factor for heart disease, the leading cause of death in the United States.[101] In addition, cigarette smoking among pregnant women can lead to premature and low birth weight births.

Since 1960, there has been a decline in smoking rates among U.S. adults. From 1960 to 1986, the percentage of men in the U.S. who smoked declined from 50 percent to 29.5 percent. For women, the decline was smaller--from 34 percent in 1960 to 23.8 percent in 1985.[102]

Despite these declines, death and disability caused by smoking continue to be a major health concern. An estimated 315,120 deaths and 949,924 years of potential life lost before age 65 resulted from cigarette smoking in 1984.[103]

This section examines one of the 17 smoking objectives contained in this priority area. It addresses state legislation prohibiting smoking in public places. The other objectives, not covered because of lack of data by state, aim to reduce risk factors, increase public and professional awareness, and improve services, surveillance, and evaluation.

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[101] *Midcourse Review*, p. 177.

[102] *MMWR* (Vol. 36, No. 45), 1987.

[103] *MMWR* (Vol. 36, No. 42), 1987.

State Legislation Prohibiting Smoking in Public Places

OBJECTIVE: By 1990, laws should exist in all 50 states and all jurisdictions prohibiting smoking in enclosed public places and establishing separate smoking areas at work and in dining establishments.

National Progress

Based on progress through 1985, it appears likely that most states and jurisdictions will have legislation in place by 1990, but that the nature and scope of these laws will vary widely. It is not likely that this legislation will extend protection to the workplace or public places in many areas.[104]

State Progress

As of October 1987, 42 states had passed laws, in varying forms, to restrict smoking in public places.[105] The Tobacco-Free Young America Project, sponsored by the American Cancer Society, the American Heart Association, and the American Lung Association, analyzed state legislation. The analysis classified legislation as either extensive, moderate, basic, and nominal. "Extensive" legislation, enacted in nine states, restricts or prohibits smoking in an average of 11 different types of public places and in public and private workplaces. Nine states have passed "moderate" legislation which regulates smoking in restaurants as well as in an average of 9.5 different types of public places. Seventeen states have passed "basic" legislation that regulates smoking in four or more types of public places. Eight states have passed "nominal" legislation which restricts smoking in one to three different public places.[106] A map follows which identifies each state's type of smoking legislation. Following the map, a chart identifies, by state, the different public places in which smoking has been restricted.

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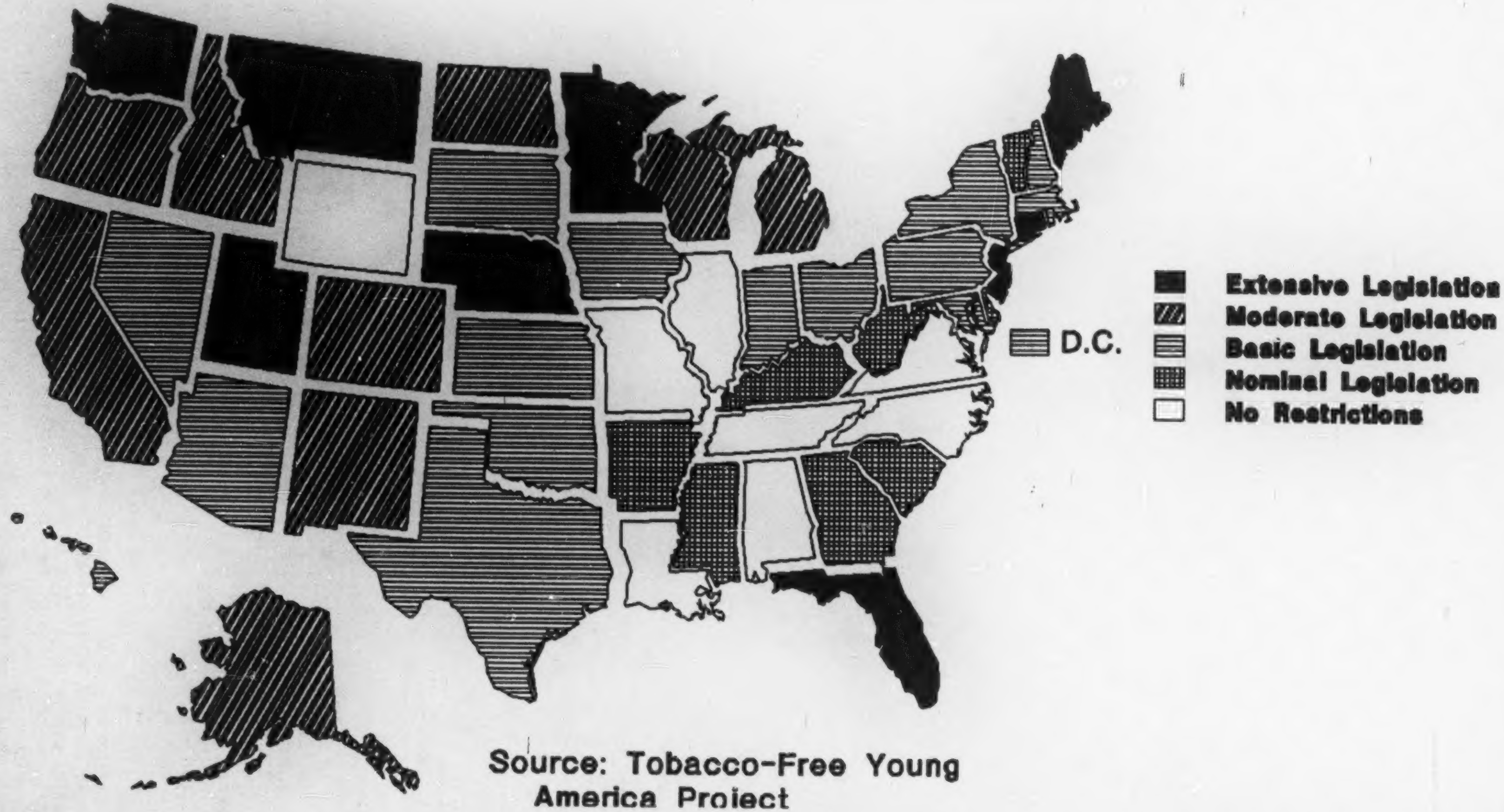
[104] *Midcourse Review*, p.189.

[105] Tobacco-Free Young America Project. "State Legislated Actions on Clean Indoor Air, Cigarette Excise Taxes, and Sales of Cigarettes to Minors". Washington, D.C., October 1987, p. 2.

[106] Ibid.

FIGURE 21.
STATE LEGISLATION PROHIBITING SMOKING IN PUBLIC PLACES


D.C.
■ Extensive Legislation
▨ Moderate Legislation
▤ Basic Legislation
▦ Nominal Legislation
☐ No Restrictions

Source: Tobacco-Free Young America Project

TABLE 51 - Public Places Where Smoking Is Prohibited by State (October 1987)

	Buses	Elevators	Government Buildings	Gymnasiums/Arenas	Health Facilities	Hotels	Libraries	Museums	Meetings	Public Places	Restaurants	Restrooms	Retail/Grocery Stores	Schools	Theaters	Workplace (private sector)
Alabama																
Alaska	X	X	X	X	X		X	X	X		X		X	X	X	X
Arizona	X	X		X	X									X	X	
Arkansas	X[1]				X									X		
California	X			X	X				X		X		X	X		
Colorado	X	X	X	X	X									X		
Connecticut	X	X	X		X				X		X		X	X	X	X
Delaware	X															
District of Columbia	X	X	X		X								X	X		
Florida	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X
Georgia	X	X														
Hawaii		X		X					X							
Idaho	X	X	X	X	X				X	X	X		X	X		
Illinois																
Indiana			X		X									X		
Iowa	X	X		X	X		X	X	X	X	X		X	X	X	X
Kansas	X	X	X	X	X		X	X	X	X	X	X	X	X	X	
Kentucky														X		
Louisiana																
Maine	X		X		X				X	X	X		X			X
Maryland	X	X			X				X		X		X			
Massachusetts	X	X		X	X						X		X			
Michigan		X	X		X			X	X		X		X	X	X	
Minnesota	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X
Mississippi	X															
Missouri																
Montana	X	X	X	X	X		X	X	X	X	X		X	X	X	X
Nebraska	X	X	X	X	X				X		X		X	X		X
Nevada	X	X	X	X	X				X					X		
New Hampshire	X	X	X	X	X				X				X	X		X
New Jersey	X	X	X	X	X		X	X		X	X		X[2]		X	X
New Mexico		X	X	X	X				X					X		X
New York	X		X	X												
North Carolina																
North Dakota	X	X	X	X	X		X		X	X	X			X	X	
Ohio	X	X	X	X	X									X		X
Oklahoma	X	X	X	X	X			X	X	X	X			X	X	
Oregon		X	X	X	X				X		X		X	X		
Pennsylvania				X	X								X			
Rhode Island	X	X	X		X		X	X			X			X		X
South Carolina	X	X	X		X						X		X	X	X	
South Dakota	X	X		X	X									X		
Tennessee																
Texas	X	X	X	X	X		X			X	X	X	X	X	X	
Utah	X	X	X	X	X		X		X	X	X		X	X	X	X
Vermont[3]																
Virginia																
Washington	X	X	X	X	X				X		X		X	X		X
West Virginia	X													X		
Wisconsin	X	X	X	X	X						X		X	X		X
Wyoming																

NOTES

1 Regulation only governs school buses.

2 Regulation does not govern department stores and shopping malls.

3 Smoking prohibited in mills, factories, barns, stables, or other outbuildings belonging to another person, and in public buildings in which the person in control has posted no smoking signs.

Source: Tobacco-Free Young America Project

MISUSE OF ALCOHOL AND DRUGS

Introduction

The misuse of alcohol and drugs has serious public health implications. The consequences of such misuse include injuries and deaths from industrial and motor vehicle accidents, fires, falls, drowning, homicide, suicide, family violence, and other violence. Adult Americans who have been drinking alcohol are involved in one-third to one-half of all accidents, crimes, and suicides.[107] In addition, the medical consequences of drinking include pancreatitis, nutritional deficiencies, malignancies, fetal alcohol syndrome, and cirrhosis.[108]

It is estimated that approximately 10.6 million adults in the United States are alcoholics and 4.6 million adolescents ages 14 to 17 are problem drinkers.[109] Another 7.3 million adults either abuse alcohol or have suffered negative consequences of alcohol abuse, such as motor vehicle accidents.

This report examines one of the 19 objectives in the misuse of alcohol and drugs priority area. The objective aims to reduce the cirrhosis mortality rate by 1990.

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[107] *MMWR* (Vol. 35, No. 45), 1986.

[108] Ibid.

[109] Ibid.

Cirrhosis

OBJECTIVE: By 1990, the cirrhosis mortality rate should be reduced to 12 per 100,000 population per year.

National Progress

This objective was reached in 1982, and the cirrhosis mortality rate continued to decline through 1985. The cirrhosis mortality rate decreased from 15.0 per 100,000 in 1973 to 11.2 per 100,000 in 1985.[110] However, cirrhosis mortality rates for nonwhites are higher than for whites and are unlikely to decline to 12 per 100,000 by 1990.[111]

State progress

By 1990, 46 states are projected to meet the objective and by 1985, 41 states had already met it. The cirrhosis fatality rate has declined in 46 states since 1980. Of the states unlikely to meet the objective by 1990, the cirrhosis death rate has increased in only one state since 1980, New Mexico. New Mexico's rate increased from 13.4 per 100,000 in 1980 to 13.8 per 100,000 in 1985.1985.

Discussion

Other measures of alcohol misuse, such as the alcoholism death rate and per capita consumption of alcohol, do not show the same improvement as does the cirrhosis mortality rate. Both of these indicators have parallel trends that show a gradual increase up to 1980 and then only a slight decline. The death rate due to alcoholism reached a peak in 1980 at 2.6 per 100,000 population and then leveled off. The per capita rates of alcohol consumption rose approximately 21 percent during the 1960s and 10.3 percent in the 1970s. In 1984, it was estimated that persons age 14 or older consumed 2.65 gallons of absolute alcohol per year, the same rate as in 1977. CDC hypothesizes that the reasons for the decline in the cirrhosis morality rate could be due to either earlier diagnosis and improvement in medical management, a change in physicians' coding of death certificates, or decreases in cases of cirrhosis unrelated to alcohol misuse. If these factors are present, CDC deduces that the decline in the cirrhosis rate does not reflect a reduction in alcoholism.[112]

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[110] Ibid.

[111] *MMWR* (Vol. 36, No. 43), 1987.

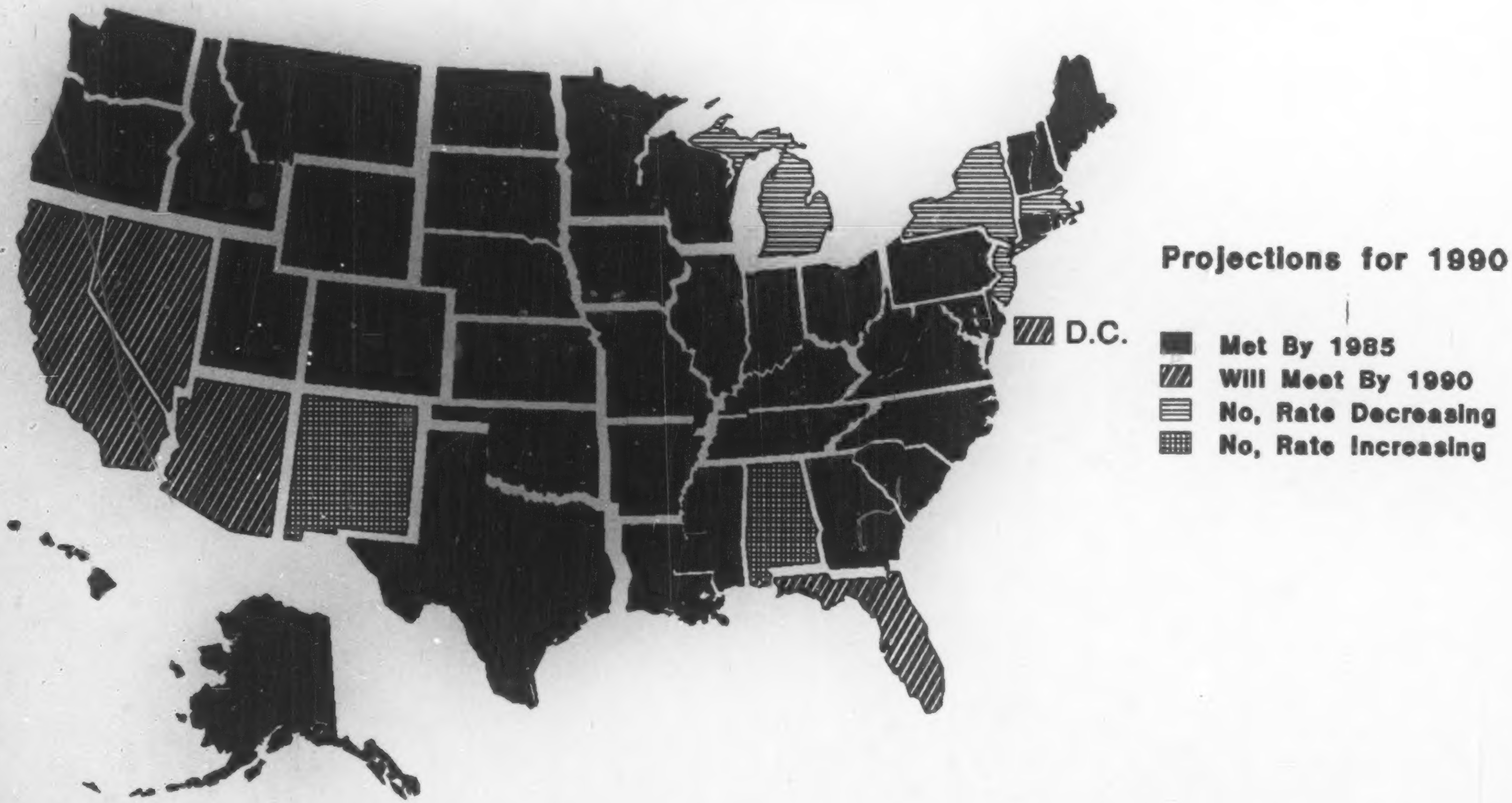
[112] *MMWR* (Vol. 35, No. 45), 1986.

TABLE 52 - Cirrhosis Rate Per 100,000 Population

	1980	1981	1982	1983	1984	1985	Annual Average Percentage Change	Is Objective Projected To Be Met?
United States	13.5	12.8	11.9	11.7	11.6	11.2	-3.67%	Met
Alabama	9.1	10.1	9.1	8.9	9.5	9.6	1.08%	Met
Alaska	9.0	9.6	11.0	8.1	7.9	7.5	-3.58%	Met
Arizona	14.4	12.9	13.1	12.0	13.0	12.8	-2.33%	Yes
Arkansas	7.8	9.8	8.7	8.2	8.0	6.7	-2.99%	Met
California	18.7	17.3	16.7	15.7	16.0	15.0	-4.31%	Yes
Colorado	9.9	8.9	9.5	9.1	9.3	8.6	-2.78%	Met
Connecticut	12.9	13.4	11.7	12.6	11.7	9.9	-5.16%	Met
Delaware	15.1	10.4	10.5	13.0	13.7	10.3	-7.37%	Met
District of Columbia	38.1	39.0	32.3	30.8	26.4	25.7	-7.57%	Yes
Florida	18.5	17.6	17.2	15.5	14.8	15.0	-4.11%	Yes
Georgia	11.8	10.5	10.4	10.1	10.6	10.1	-3.06%	Met
Hawaii	8.6	6.9	6.2	5.9	6.4	7.2	-3.49%	Met
Idaho	7.5	6.2	9.2	8.7	7.4	5.4	-6.36%	Met
Illinois	14.1	13.5	12.5	11.9	12.3	10.9	-5.02%	Met
Indiana	10.4	9.8	8.4	9.0	7.7	9.1	-2.64%	Met
Iowa	8.0	7.7	7.9	7.7	7.1	7.5	-1.28%	Met
Kansas	8.8	8.8	7.8	7.2	7.7	6.9	-4.75%	Met
Kentucky	9.2	9.9	9.1	9.4	9.0	9.1	-.22%	Met
Louisiana	11.3	10.4	8.3	9.5	8.9	8.6	-5.31%	Met
Maine	12.8	14.0	14.5	12.3	12.4	11.5	-2.12%	Met
Maryland	11.7	10.3	9.6	10.7	11.0	9.7	-3.68%	Met
Massachusetts	14.1	13.0	13.0	12.0	14.4	13.0	-1.61%	No
Michigan	14.7	13.6	13.7	13.8	13.3	13.9	-1.11%	No
Minnesota	8.2	9.2	8.1	8.0	9.1	7.9	-.74%	Met
Mississippi	7.8	8.5	7.1	8.5	7.7	8.2	1.01%	Met
Missouri	9.9	9.5	9.6	8.5	8.0	7.8	-4.66%	Met
Montana	12.8	14.0	11.1	11.5	10.2	10.3	-4.25%	Met
Nebraska	8.1	8.1	7.8	7.5	7.2	7.3	-2.06%	Met
Nevada	22.6	18.6	15.4	17.5	15.3	13.3	-10.06%	Yes
New Hampshire	13.1	11.2	10.4	11.3	11.9	8.8	-7.65%	Met
New Jersey	15.8	15.4	14.2	15.3	14.2	15.2	-.77%	No
New Mexico	13.4	13.6	13.1	13.6	12.3	13.8	.59%	No
New York	20.3	18.9	17.7	17.0	16.9	17.0	-3.49%	No
North Carolina	12.2	10.9	10.2	9.2	9.6	9.1	-5.69%	Met
North Dakota	12.3	8.8	7.4	8.4	6.8	7.2	-10.16%	Met
Ohio	12.0	11.3	10.2	9.7	9.8	9.1	-5.38%	Met
Oklahoma	10.4	12.2	9.6	8.2	7.8	7.6	-6.08%	Met
Oregon	13.0	13.3	10.4	11.2	11.7	10.4	-4.36%	Met
Pennsylvania	13.7	12.9	12.0	11.6	11.0	10.5	-5.18%	Met
Rhode Island	15.8	13.8	13.4	12.7	13.4	11.1	-6.82%	Met
South Carolina	9.7	9.8	9.0	9.5	9.7	9.7	.00%	Met
South Dakota	11.3	10.3	7.2	10.2	7.0	8.6	-5.31%	Met
Tennessee	9.8	8.7	8.3	8.4	8.4	8.1	-3.74%	Met
Texas	10.4	9.3	8.7	8.5	8.7	8.2	-4.64%	Met
Utah	6.8	6.7	7.3	6.3	5.1	5.5	-4.15%	Met
Vermont	10.6	13.6	13.1	11.4	10.2	10.8	.37%	Met
Virginia	11.4	10.3	9.2	9.9	9.8	9.6	-3.38%	Met
Washington	11.7	11.4	10.9	10.6	10.1	10.0	-3.09%	Met
West Virginia	14.7	12.3	10.0	10.1	9.5	10.1	-7.23%	Met
Wisconsin	9.9	10.3	8.7	9.2	7.8	9.0	-1.89%	Met
Wyoming	10.4	9.2	9.2	6.8	5.3	9.2	-2.42%	Met

Source: National Center for Health Statistics

FIGURE 22.
WILL STATES MEET OBJECTIVE FOR CIRRHOSIS MORTALITY?


Projections for 1990
D.C.
Met By 1985
Will Meet By 1990
No, Rate Decreasing
No, Rate Increasing

CONTROL OF STRESS AND VIOLENT BEHAVIOR

Introduction

Research has indicated that stress can lead to psychological or physiological problems manifested in a variety of ways, such as fatigue, headaches, obesity, absenteeism, illness, accident-proneness, and violence. Violent behavior, one of the extreme outcomes of stress, exacts a huge toll on America's physical and mental health. Suicide and homicide, for instance, lead to thousands of premature deaths annually. In 1985, homicides were the leading cause of death for black males ages 15 to 44, and suicide was the second leading cause of death among young people ages 15 to 24.

Adolescence generally can be described as a time of confusion and ambiguity.[113] However, relatively little is known about specific factors that contribute to suicide in general and youth suicide in particular.[114] Risk factors for homicide are also not clearly understood. Research is needed to assess the biological, social, and cultural factors contributing to such violent behaviors. For example, the misuse of alcohol and other drugs relative to suicidal, as well as homicidal, behavior could provide some useful insights.

The 14 objectives in this priority area are designed to reduce the levels of stress and the incidence of violent behavior. The objectives focus on black male homicide rates, youth suicide rates, handgun ownership, knowledge of community resources, professional awareness, improvement of services, and stress identification and control. This report examines two of the 14 objectives relating to the control of stress and violent behavior--homicide and suicide.

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[113] Ronald Maris, Ph.D., The Adolescent Suicide Problem, Suicide and Life Threatening Behavior, (Vol. 15(2)). Human Sciences Press, Summer 1985, p. 100.

[114] *Midcourse Review*, p. 247.

Homicide

OBJECTIVE: By 1990, the death rate from homicide among Black males ages 15 to 24 should be reduced to below 60 per 100,000.

National Progress

In 1978, the death rate from homicide among black males ages 15 to 24 was 70.7 per 100,000, and in 1983, the rate was 66.8 per 100,000.[115] Based on this decline, it is possible that this objective will be met by 1990. According to the *Midcourse Review*, increases in homicide rates occurred until 1980, but declined from 1980 to 1984.

State Progress

It is not possible to calculate homicide rate projections for this objective since state population estimates do not exist for black males ages 15-24. However, between 1980 and 1985, 23 states had a substantial decrease in the number of homicides of black males 15 to 24 years of age. States with the greatest decline included California (279 to 214), Florida (139 to 96), Illinois (230 to 136), Missouri (107 to 58), Pennsylvania (113 to 39) and Texas (171 to 121). The number of homicides for 25 states remained relatively constant over this same period showing an increase or decline of fewer than 5 cases between 1980 and 1985. Three states (Connecticut, Massachusetts, and Michigan) had substantial increases in the number of homicides for this population.

Discussion

The majority of homicides among young black males were committed with handguns. Methods need to be developed for limiting the use of handguns and other firearms in communities across the United States. In addition, there is a need for further research into specific risk factors involved in homicide rates for both black and Hispanic males. This research might include the presence, use of, and attitudes toward, firearms and other lethal weapons in minority versus non-minority households, and the cultural differences among various ethnic, racial, and socioeconomic groups regarding the use of violence as a means of resolving conflict.[116]

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[115] Ibid., p. 244.

[116] Ibid., p. 245.

TABLE 53 - Number of Homicides Among Black Males 15 to 24 Years of Age

	1980	1981	1982	1983	1984	1985
United States	2365	2231	2066	1870	1710	1789
Alabama	61	51	67	39	48	47
Alaska	0	2	1	0	0	0
Arizona	9	2	2	4	1	4
Arkansas	24	23	21	18	19	13
California	279	248	202	209	185	214
Colorado	6	4	1	8	6	6
Connecticut	15	9	14	18	11	24
Delaware	3	3	6	3	2	1
District of Columbia	43	41	30	40	40	34
Florida	139	122	121	109	100	96
Georgia	74	90	58	57	69	71
Hawaii	0	1	1	0	0	0
Idaho	0	0	0	0	0	0
Illinois	230	211	192	181	165	136
Indiana	47	38	46	32	30	29
Iowa	5	2	5	3	3	1
Kansas	15	18	11	6	4	8
Kentucky	17	13	11	13	6	7
Louisiana	99	126	124	110	69	78
Maine	0	0	0	0	0	0
Maryland	77	66	68	65	75	70
Massachusetts	8	18	16	17	17	21
Michigan	127	116	118	150	150	190
Minnesota	1	1	7	3	4	4
Mississippi	60	43	51	34	33	40
Missouri	107	95	87	49	55	58
Montana	0	0	0	0	0	0
Nebraska	6	3	5	5	2	3
Nevada	8	5	4	3	5	4
New Hampshire	0	0	0	0	0	0
New Jersey	46	64	46	41	48	41
New Mexico	2	4	0	1	0	0
New York	272	276	238	216	207	236
North Carolina	55	39	52	29	34	49
North Dakota	0	0	0	0	0	0
Ohio	79	66	64	45	41	49
Oklahoma	20	22	11	17	9	10
Oregon	1	4	2	3	0	2
Pennsylvania	113	107	85	77	54	39
Rhode Island	0	1	0	3	1	3
South Carolina	36	22	34	22	20	28
South Dakota	0	0	0	0	0	0
Tennessee	53	47	57	58	39	32
Texas	171	182	153	121	109	121
Utah	2	0	1	0	1	0
Vermont	0	0	0	0	0	0
Virginia	35	32	36	44	39	39
Washington	6	6	7	4	4	6
West Virginia	1	2	2	6	3	2
Wisconsin	13	6	9	7	2	9
Wyoming	0	0	0	0	0	0

Source: National Center for Health Statistics

Suicide

OBJECTIVE: By 1990, the rate of suicide among people 15 to 24 should be below 11 per 100,000.

National Progress

It is uncertain whether this objective will be met. From 1980 to 1983, the rate of suicide among young people ages 15 to 24 decreased from 12.33 deaths to 11.9 deaths per 100,000. The rate increased in 1984, however, to 12.53 deaths per 100,000, and in 1985 to 12.95 deaths per 100,000.

State Progress

By 1990, 11 states are projected to meet this objective. By 1985, eight states had already met it. Five states (Alaska, Florida, North Dakota, Oregon, and Washington) have shown substantially declining incidence rates, even though they are not expected to meet the objective. Thirty of the 40 states unlikely to meet the objective have increasing suicide rates among persons 15 to 24 years of age. Six states have shown substantial increases in suicide rates in this age group since 1980. These states include Colorado (15.76 to 20.68 per 100,000 population), Indiana (9.06 to 12.53), Iowa (9.64 to 14.16), New Hampshire (11.70 to 19.88), South Carolina (9.03 to 12.85), and Wyoming (20.43 to 37.04).

Discussion

Suicide is the second leading cause of death among persons 15 to 24 years of age, after accidents. Firearms are used in the largest proportion of deaths due to youth suicide. The firearm suicide rate increased from 2.3 per 100,000 in 1933 to 5.5 per 100,000 in 1982.[117]

When examining national suicide statistics, it is important to realize that suicides are substantially underestimated due to underreporting on death certificates. Reasons for underreporting range from the difficulties in establishing suicidal intent; certifier error or bias; and lack of awareness of a suicide because a body was never found.[118]

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[117] *MMWR* (Vol. 31, No. 27), 1986.

[118] Ibid.

TABLE 54 - Number of Suicides Among Persons 15 to 24 Years of Age

	1980	1981	1982	1983	1984	1985
United States	5239	5161	5025	4845	5026	5121
Alabama	74	64	66	63	64	74
Alaska	21	18	21	15	24	19
Arizona	95	98	106	90	94	106
Arkansas	45	45	35	53	49	53
California	548	617	582	535	572	584
Colorado	90	101	90	91	84	110
Connecticut	50	55	41	56	45	46
Delaware	16	22	17	9	11	6
District of Columbia	11	10	11	15	12	10
Florida	258	257	244	195	252	229
Georgia	121	120	130	103	97	121
Hawaii	23	21	28	13	28	20
Idaho	27	32	23	26	38	26
Illinois	240	230	192	204	184	235
Indiana	95	118	113	104	103	117
Iowa	53	53	63	70	72	67
Kansas	65	52	44	54	51	45
Kentucky	82	69	84	76	77	86
Louisiana	120	98	126	113	106	109
Maine	26	25	33	40	37	29
Maryland	91	84	96	91	98	88
Massachusetts	104	101	90	111	93	112
Michigan	216	212	208	213	215	208
Minnesota	102	103	108	65	93	97
Mississippi	55	51	42	54	46	54
Missouri	114	99	97	103	106	120
Montana	28	27	19	25	28	25
Nebraska	28	30	29	27	37	32
Nevada	39	44	46	30	37	42
New Hampshire	20	26	15	23	19	34
New Jersey	125	92	104	95	110	99
New Mexico	64	60	69	62	65	60
New York	299	280	239	221	248	213
North Carolina	129	121	145	117	127	124
North Dakota	26	17	23	17	19	17
Ohio	253	230	235	210	231	213
Oklahoma	78	104	89	87	71	89
Oregon	76	66	55	58	59	61
Pennsylvania	265	239	229	228	240	235
Rhode Island	22	22	21	22	14	18
South Carolina	57	75	64	54	54	77
South Dakota	20	19	21	20	21	19
Tennessee	85	91	85	92	111	87
Texas	382	404	366	411	414	416
Utah	41	42	44	40	47	44
Vermont	17	18	20	14	14	11
Virginia	132	118	132	123	113	134
Washington	120	106	96	102	102	97
West Virginia	44	34	38	42	29	37
Wisconsin	128	126	131	136	142	136
Wyoming	19	15	20	27	23	30

Source: National Center for Health Statistics

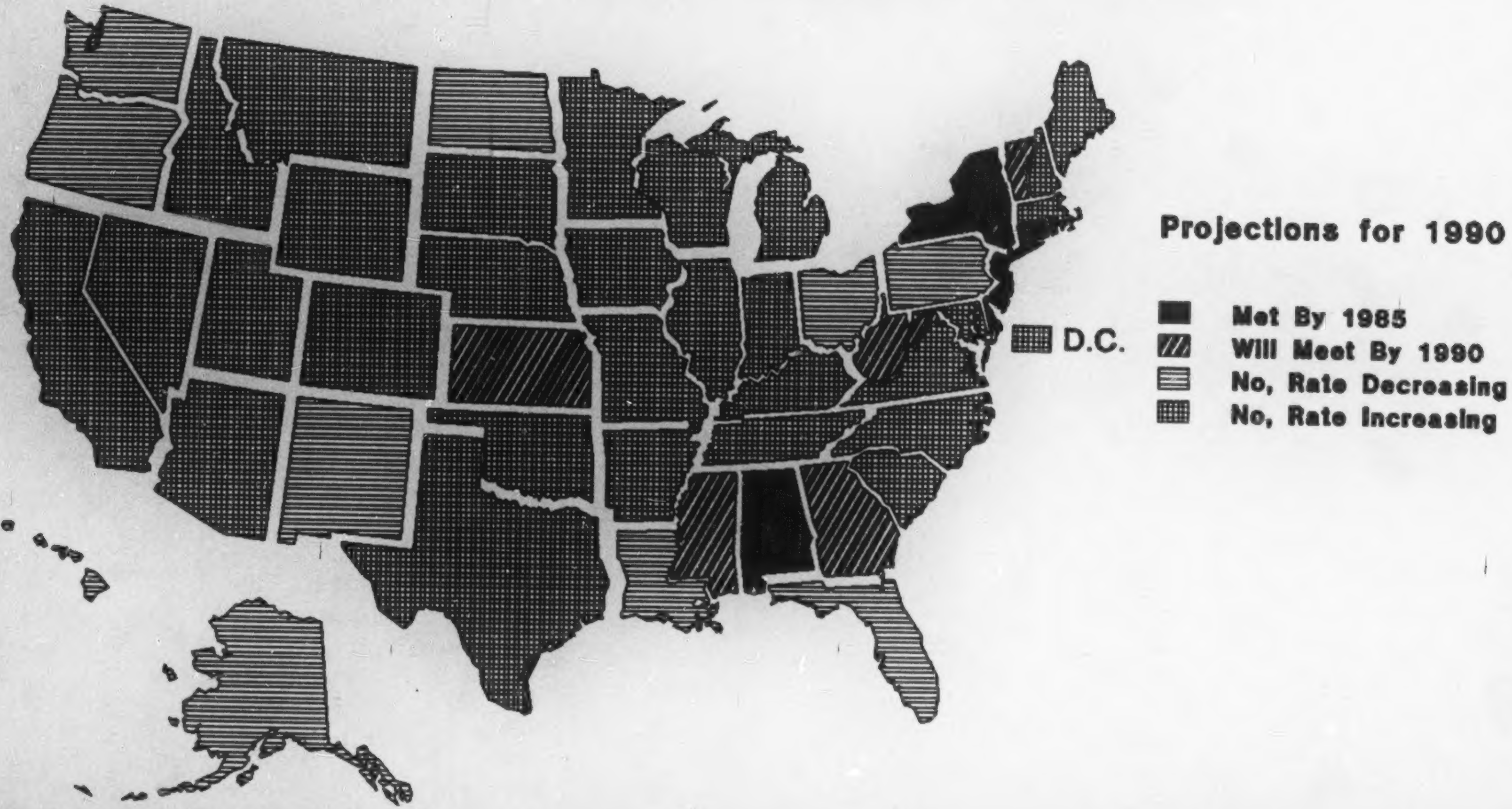
TABLE 55 - Suicide Rate Per 100,000 Persons 15 to 24 Years of Age

	1980	1981	1982	1983	1984	1985	Annual Average Percentage Change	Is Objective Projected To Be Met
United States	12.33	12.25	12.09	11.90	12.53	12.95	.98%	Unlikely
Alabama	10.01	8.72	9.14	8.89	9.16	10.72	1.38%	Met
Alaska	30.43	26.09	29.17	19.48	29.63	22.62	-5.76%	No
Arizona	18.41	18.88	20.46	17.48	18.25	20.38	2.06%	No
Arkansas	11.03	11.08	8.71	13.32	12.41	13.55	4.21%	No
California	12.22	13.94	13.36	12.47	13.51	13.86	2.56%	No
Colorado	15.76	17.88	16.13	16.55	15.58	20.68	5.58%	No
Connecticut	8.91	9.84	7.47	10.35	8.47	8.78	-.30%	Met
Delaware	13.56	18.80	14.78	7.96	9.91	5.50	-16.50%	Met
District of Columbia	8.66	8.26	9.57	13.76	11.54	10.20	3.33%	No*
Florida	15.90	15.43	14.63	11.68	15.08	13.66	-2.98%	No
Georgia	11.56	11.45	12.45	9.92	9.33	11.55	-.02%	Yes
Hawaii	11.98	11.17	15.30	7.22	15.82	11.43	-.94%	No
Idaho	15.52	18.50	13.53	15.48	22.89	15.95	.55%	No
Illinois	11.21	10.98	9.41	10.28	9.48	12.38	2.00%	No
Indiana	9.06	11.49	11.25	10.67	10.80	12.53	6.68%	No
Iowa	9.64	9.85	12.07	13.83	14.66	14.16	8.01%	No
Kansas	14.41	11.79	10.23	12.92	12.56	11.45	-4.50%	Yes
Kentucky	11.70	9.99	12.33	11.36	11.76	13.37	2.72%	No
Louisiana	14.18	11.53	14.88	13.55	13.01	13.69	-.70%	No
Maine	12.62	12.14	16.18	19.80	18.50	14.72	3.13%	No
Maryland	11.42	10.59	12.31	11.82	12.86	11.67	.44%	No
Massachusetts	9.45	9.27	8.44	10.63	9.10	11.20	3.47%	No
Michigan	12.03	12.15	12.34	13.07	13.49	13.27	1.98%	No
Minnesota	12.86	13.22	14.21	8.81	12.93	13.82	1.44%	No
Mississippi	11.18	10.34	8.59	11.18	9.62	11.46	.51%	Yes
Missouri	12.57	11.10	11.14	12.12	12.69	14.65	3.11%	No
Montana	18.79	18.62	13.38	17.99	20.59	18.94	.16%	No
Nebraska	9.46	10.34	10.25	9.78	13.70	12.21	5.24%	No
Nevada	26.35	29.53	31.08	20.55	25.69	29.17	2.05%	No
New Hampshire	11.70	15.03	8.72	13.45	11.11	19.88	11.20%	No
New Jersey	9.73	7.16	8.18	7.55	8.82	8.00	-3.83%	Met
New Mexico	24.81	23.35	26.95	24.31	25.69	24.00	-.66%	No
New York	9.59	9.05	7.83	7.33	8.36	7.30	-5.30%	Met
North Carolina	11.26	10.60	12.87	10.51	11.53	11.36	.17%	No
North Dakota	19.55	12.98	17.97	13.60	15.70	14.66	-5.60%	No
Ohio	12.57	11.68	12.28	11.34	12.78	12.03	-.88%	No
Oklahoma	13.85	18.41	15.51	15.18	12.72	16.42	3.46%	No
Oregon	16.38	14.60	12.61	13.81	14.29	14.99	-1.76%	No
Pennsylvania	12.38	11.30	11.03	11.25	12.15	12.24	-.23%	No
Rhode Island	12.22	12.29	11.93	12.72	8.33	10.98	-2.13%	Met
South Carolina	9.03	11.79	10.21	8.77	8.85	12.85	7.31%	No
South Dakota	14.81	14.39	16.28	16.00	17.21	16.10	1.68%	No
Tennessee	9.95	10.76	10.22	11.26	13.79	10.92	1.86%	No*
Texas	13.78	14.53	13.04	14.66	14.91	15.06	1.80%	No
Utah	13.90	14.48	15.38	14.18	16.79	15.71	2.49%	No
Vermont	17.00	18.00	20.20	14.29	14.58	11.58	-7.39%	Yes
Virginia	12.73	11.35	12.93	12.19	11.30	13.56	1.28%	No
Washington	15.58	13.95	12.99	14.17	14.43	13.86	-2.32%	No
West Virginia	12.68	9.88	11.24	12.69	8.98	11.71	-1.58%	Yes
Wisconsin	13.96	13.91	14.79	15.80	16.92	16.67	3.61%	No
Wyoming	20.43	16.13	21.98	30.68	27.38	37.04	12.63%	No

Source: Number of Deaths -- National Center for Health Statistics
State Population Estimates -- Census Bureau

* State had met the objective in 1985, yet based on its increasing rate, it will not meet the objective by 1990.

FIGURE 23.
WILL STATES MEET OBJECTIVE FOR SUICIDE AMONG PERSONS AGES 15 TO 24?


D.C.
Projections for 1990
■ Met By 1985
▨ Will Meet By 1990
▤ No, Rate Decreasing
▦ No, Rate Increasing

Appendix A

Methodology for Computing Annual Average Percentage Change and 1990 Projections

Annual Average Percentage Change

This value reflects annual increases or decreases in rates averaged over the time period specified. It is calculated by dividing the final year data by the first year data. The nth root of that value is taken, where n equals the number of yearly changes considered.

The reader, when interpreting the significance of this value, should understand that the formula does not take into account sporadic increases or decreases in rates during the specified time period.

1990 Projections

Linear regression was used to determine the 1990 projections. A linear regression equation was applied to data for 1980 through 1985 (or 1986 where available), and projections where made for 1990 based on the line of progress established by the equation.

Projections are not absolute predictors of the future, but merely indicate what may happen based on recent trends. When using linear regression, it is assumed that trends will continue in the future at the same rate as in the previous years in which data were used for the equation. Thus, linear regression does not take into account external events that may affect the course of a disease (e.g., the effect of AIDS on tuberculosis).

In addition, trends in some measures exhibited greater progress in the early 1980s and then halted or reversed in the mid-1980s. These projections are probably more optimistic than warranted. Likewise, some rates demonstrated slow progress in the early 1980s with accelerated progress in the mid-1980s. Projections based on these data are likely to be less optimistic than warranted.

APPENDIX B.
Survey of State Disease Prevention and Health Promotion Activities

1. Has your state established time-limited disease prevention/health promotion objectives?

   _46_ a. Yes
   _9_ b. No (IF NO, GO TO QUESTION 7)

2. Below is a chart which lists the 15 priority areas from Promoting Heath/Preventing Disease: Objectives for the Nation. Please complete the chart in the following manner:

   a) In the second column, put an "x" next to each priority area for which objectives have been established in your state. If some objectives do not fall into any of the priority areas, please write the additional categories in the blank spaces provided.

   b) In the third column, write in the year for which the majority of objectives in the priority area are set to be achieved (e.g., 1985, 1990, 2000).

   c) In the columns under "Quantifiable", put an "x" in the appropriate box for which the percent of the objectives in the priority area are quantifiable. Quantifiable refers to objectives that are stated in terms of rates, number of cases, or existence or lack of implementation.

   d) In the columns under "Measurable", put an "x" in the appropriate box for which the percent of the objectives in the priority area are measurable. Measurable means that the state will have data to assess whether or not the objective has been met when the date set for the objective is reached.

Priority Areas	State Objectives	Year	Quantifiable				Measurable			
			0-25%	26-50%	51-75%	76-100%	0-25%	26-50%	51-75%	76-100%
1. Blood Pressure	40		3	1	6	25	4	5	7	22
2. Family Planning	39		3	2	5	27	3	5	5	24
3. Pregnancy and Infant Health	43		0	5	6	30	0	5	11	24
4. Immunizations	42		1	2	6	31	0	3	9	28
5. Sexually Transmitted Disease	41		1	4	3	31	2	5	5	27
6. Toxic Agent Control	27		8	4	0	13	8	6	2	9
7. Occupational Safety	22		7	1	3	10	10	2	3	6
8. Accident Prevention & Injury Control	35		4	3	4	24	2	3	8	20
9. Dental Health	40		5	3	2	27	6	4	7	21
10. Surveillance & Control of Infectious Disease	35		2	4	6	22	2	5	6	20
11. Physical Fitness	26		4	2	2	17	6	6	4	9
12. Smoking and Health	37		3	2	4	24	2	7	6	18
13. Stress & Violent Behavior	25		2	4	3	15	3	8	5	9
14. Alcohol & Drugs	30		2	5	3	17	3	10	4	10
15. Nutrition	40		9	1	4	23	7	3	12	15
16.										
17.										

3. To what degree were each of the following useful in the development of the state objectives (circle the appropriate number for each selection):

a. 1990 Health Objectives for the Nation

0 (0)	1 (1)	2 (2)	3 (4)	4 (5)	5 (14)	6 (18)	no response (2)
little						a great deal	

b. Model Standards for Community Preventive Health Services

0 (6)	1 (4)	2 (10)	3 (7)	4 (3)	5 (5)	6 (8)	no response (3)
little						a great deal	

c. Other ______________________(specify)

0	1	2	3	4	5	6
little						a great deal

4. Does the state health agency publish report(s) on the state's progress in meeting the state health objectives?

24 a. No
21 b. Yes. If yes, please send copies of the report(s) to the Public Health Foundation. If copies of the report are not readily available, please return this survey once it has been completed and send the report when it is available.
1 c. No response.

5. Has the existence of the objectives affected any decisions, such as resource development or program allocation, made by the state legislature?

27 a. No
18 b. Yes
1 c. No response

If yes, please explain.

6. Has a statewide conference been held on the state health objectives?

15 a. Yes, in (specify date) ______________
2 b. No, but one is planned for (specify date) ______________
28 c. No
1 d. No response.

7. Has a disease prevention/health promotion unit been established within the state health agency?

  15 a. No
  40 b. Yes, in ____________ (year)

Please briefly describe the unit

8. If the state (or state health agency) has not yet established objectives, has it begun a process for doing so?

  8 a. Yes
  1 b. No
  46 c. Not applicable because state has already established objectives.

9. Planning for the establishment of the year 2000 national health objectives has recently begun. In your opinion, how can states' participation in the development of the new objectives be encouraged?

States expressed the desire to provide input to the objective-setting process and to review the draft objectives.

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